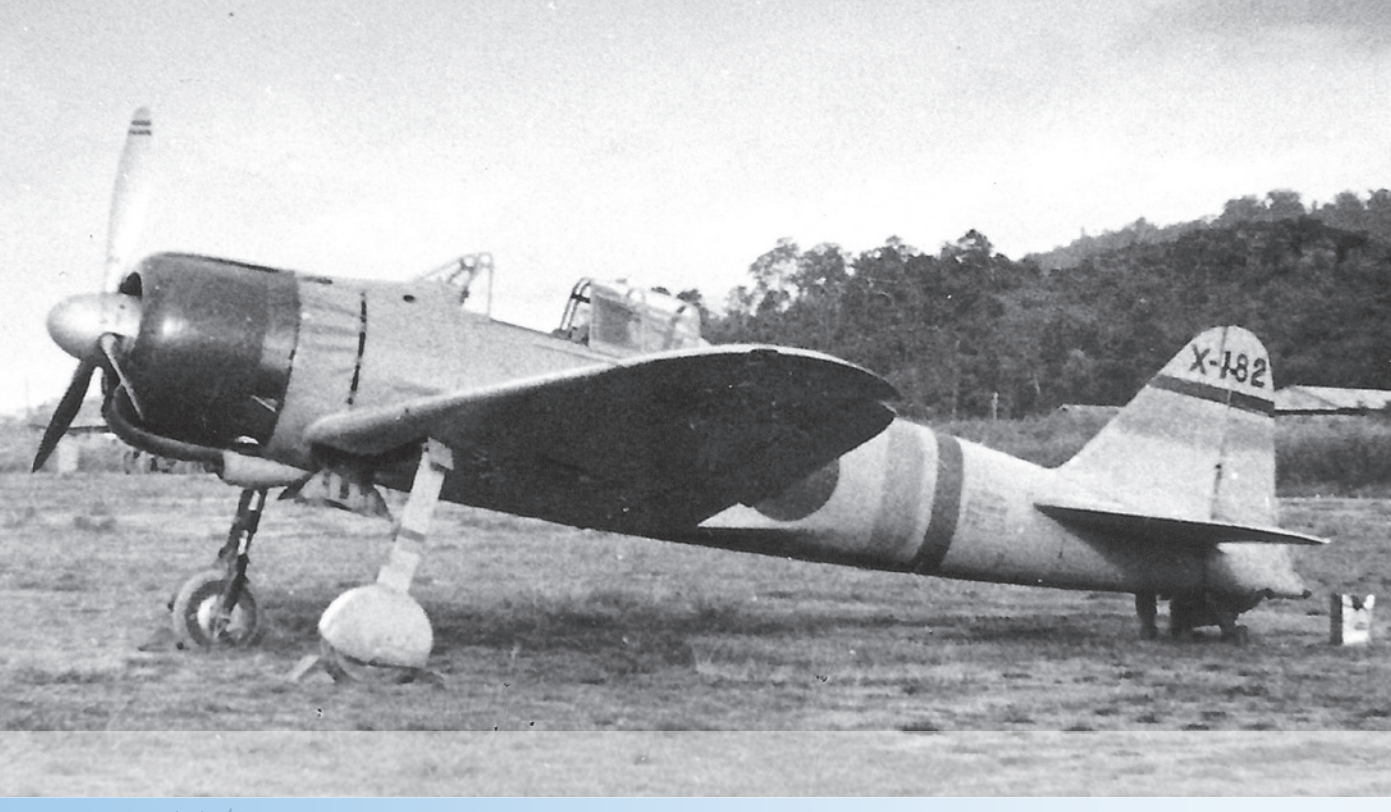
DOGFIGHT

A6M2/3 Zero-sen

New Guinea and the Solomons 1942

Michael John Claringbould



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CHAPTER 1
IN BATTLE

The first offensive operation for land-based Zero-sens of the Imperial Japanese Naval Air Force (IJNAF) in the South Seas was an uneventful bomber escort mission on 24 February 1942, followed a few days later by a strafing mission. The Zero-sen performed more strafing attacks in this theater than is generally acknowledged, and these two key missions are described here for the first time in the English language.

After familiarizing themselves with the area all the way from Rabaul down to Gasmata, Lt Harutoshi Okamato and his pilots from the 4th Kokutai would escort a full chutai of nine G4M1 "Betty" bombers from the same unit (the 4th was a composite fighter and land-attack bomber unit) for the first such raid on the capital of Papua, Port Moresby. The 4th's Zero-sens had in fact flown two combat missions already, although both had been defensive operations. They had taken place when pilots made the only attempt to use the A6M2 Zero-sen as a nightfighter in New Guinea – an event which occurred over Rabaul on 3/4 February 1942. Then, on 23 February 1942, pilots had chased a B-17E that was later forced to crash-land in a swamp on New Guinea's northern coast due to combat damage inflicted by A5M4 "Claude" fighters.

The mission on 24 February was different, however, as the pilots involved were taking the fight to the enemy. "Betty" pilot Lt Shigeo Yamada, who had led the bombers to Rabaul from Truk, would command the combined mission – a situation that would frustrate Harutoshi, whose companions on this landmark first mission included FPO3c Seiji Ishikawa and three other unidentified pilots. The combined formation of bombers and their five Zero-sen escorts left Rabaul at 0935 hrs, as noted by Ishikawa:

> It was an honour for me to fly the third position in this landmark flight. It was a perfect day with no cloud. When we reached the southern coast of New Britain, we discovered that the heights of the mountains substantially differed to those indicated on the aerial chart. In poor weather flying this would prove fatal, so I marked the real heights in pencil. After passing Gasmata to our right,

we crossed the ocean and began to see New Guinea on the horizon. We prepared our oxygen systems to ensure there were no abnormalities. We climbed to 6,000m to cross the Owen Stanley Mountains.

When we entered Port Moresby airspace, we carefully watched for enemy fighters, which we expected. I then saw the enemy airfield for the first time cut out from the jungle. There was a large aircraft positioned at right angles to the runway, with two smaller ones off the field. When I turned my eyes to the harbour I counted one, two, three, four . . . a total of 12 flying boats, moored randomly throughout the harbor. A silver-colored aircraft was climbing from the azure sea below. I thought to myself how angry the enemy will be when we return another day to destroy these flying boats. When we finally got back to Rabaul, we all discussed how much we wanted to destroy them.

Lt Harutoshi Okamoto poses for the camera while serving with the 12th Kokutai in China, prior to him transferring to the Chitose then 4th Kokutai at Rabaul. He was the first and last commander of Rabaul's Zero-sen force, including later serving as hikotaicho of the 253rd Kokutai. Post-war, Okamoto joined the Japanese Self-Defense Forces. (Author's Collection)

Of this same raid Okamoto wrote:

Some of our few Zeros were worn-out, and even unreliable. With our task to protect the bombers, we were ready for action against Port Moresby. It was a happy day as there was not a single cloud in the sky, and a perfect opportunity was on offer. My aerial chart had lower mountain heights to the real ones. I foresaw a situation whereby in bad weather our pilots would need minimum safe altitudes for instrument flight. I made a mental note to obtain reliable heights in future. I looked down at Gasmata on my right then crossed the ocean until New Guinea came into view. I ordered the others to prepare their oxygen masks. Once they confirmed they were working, we climbed to 6,000m to cross the Owen Stanley Mountains, then flew straight ahead and entered the sky above Port Moresby.

The expected enemy fighters failed to materialize, and I saw a red clay runway in the jungle where a large aircraft was parked at right angles in its center. Two other parked aircraft were completely unaware of our presence. We were disappointed with the lack of prey. However, when I looked out to sea, there were up to 14 large flying boats irregularly moored around the bay. I saw one silvery airframe clearly reflected on the azure sea as it departed.

Our duty was to protect the bombers. However, I was yearning to attack. It was hard to stay calm and I could barely do so. I was looking towards the land attack bombers, hoping for a sign, when a radio call came – "fighters, fighters, there is no need for an attack." Of course, this message also sang in my other pilots ears. There was no mistaking the order. I felt wretched, almost berserk from wanting to attack. Disappointment swelled in our breasts, and I was angry. Anger would not improve anything, so I ordered my fighters to return home. I gently waggled my wings in order to try to calm my men.

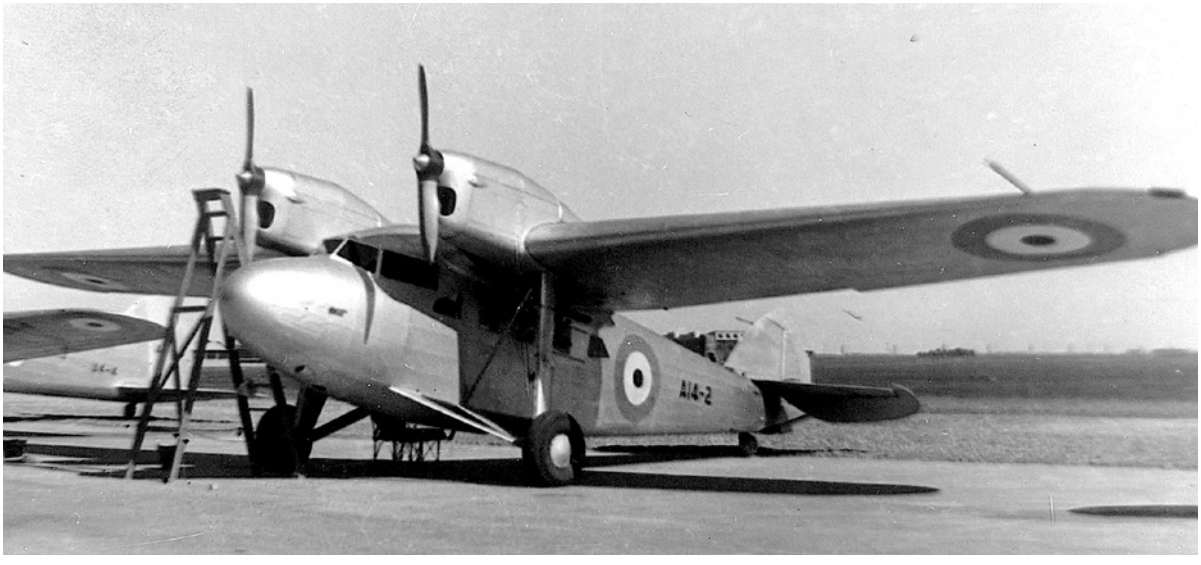
This all occurred shortly after 1100 hrs. The departing "silvery airframe" sighted by Okamoto and Ishikawa was in fact S 23 Empire flying boat A18-12 of the Royal Australian Air Force (RAAF), which had landed in Fairfax Harbour at

During the early days at Rabaul, A6M2 Model 21s from the initial batch of fighters issued to the 4th Kokutai are serviced shortly after their arrival in the South Seas theater. The aircraft in the foreground, which is still fitted with an aerial mast, has had the tail code removed by the censor. (Author's Collection)

1122 hrs, refueled, then departed at 1230 hrs. While the Zero-sens hung back, Lt Yamada's nine "Bettys" approached at 18,000ft and then climbed to 23,000ft so as to avoid fire from the Australian Army's 23rd Heavy Anti-Aircraft (AA) Battery, before dropping 108 60kg bombs over the town and harbor area. With no aerial opposition, they made several leisurely passes over Port Moresby for more than an hour, although accurate AA had quickly broken them up into two groups. A total of 66 three-inch AA rounds were fired, noted as "consistently accurate" in the 23rd Heavy Anti-Aircraft Battery's records, although not a single "Betty" was hit.

Built between savannah rolling hills, at this early stage of the war Port Moresby boasted only a small population. The hills were green at this time of year, and they varied in color from dry brown to lush green depending on whether it was wet or dry season. Apart from a modest Australian Army presence at Murray Barracks to the rear of the town in a nearby valley, the RAAF Catalina base on the edge of the harbor and limited dispersed facilities in the vicinity, there was little else of military worth. The main airfield at Seven-Mile Drome was a rough dirt runway that had been upgraded by RAAF engineers in late 1941, although refueling was still conducted by manhandled 44-gallon fuel drums. As such, for the Japanese there was nothing to target at either airfield, except the occasional parked aircraft. Thus, it is easy to understand why the Zero-sen pilots were so fixated by the flying boats.

The 60kg bombs dropped by Yamada's "Bettys" were dubbed "daisy cutters" by the Australians on the ground. The blasts destroyed the two smaller aircraft seen by Ishikawa and Okamoto – Hudson A16-167 and Gannet A14-2, the latter being a rare type impressed into RAAF service in June 1940. The Gannet,



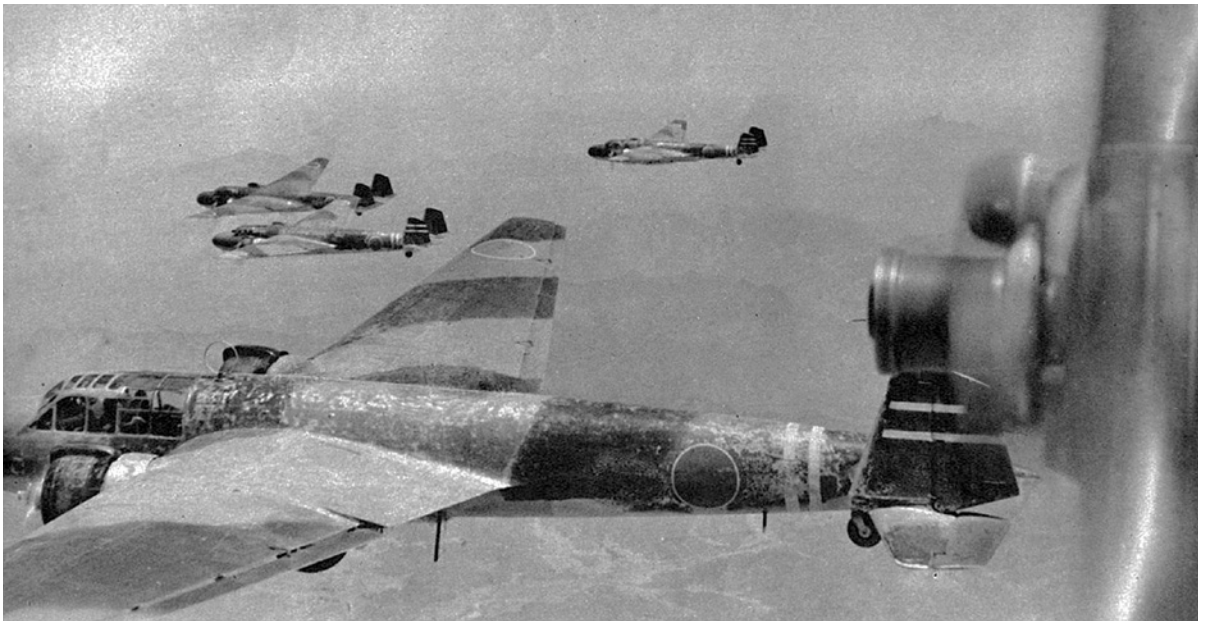
Gannet A14-2 was impressed into RAAF service in June 1940 and destroyed by "Bettys" of the 4th Kokutai during the 24 February 1942 raid on Seven-Mile Drome, near Port Moresby. The Australian-designed and built twin-engined aircraft had evacuated civilians from the New Guinea highlands just days prior to its destruction. (Author's Collection)

an unusual high-wing twin-engined design, had just evacuated civilians from the highlands of New Guinea to Port Moresby. Yamada's bombs also hit a wooden building being used as a military hospital at Murray Barracks, destroying several wards and other nearby structures. The patients had already been evacuated to slit trenches and were unharmed, although one RAAF rating was killed by shrapnel.

The Naval Office at Port Moresby later telegraphed a report to the Royal Australian Navy (RAN) HQ in Melbourne, Victoria, stating that the raid shortly after noon on 24 February marked the first daylight attack on the town. Senior RAN officers reading the report believed that the AA batteries had dissuaded the enemy bombers from their main objective, but this was not the case. During the raid, Okamoto and his pilots had loitered above and to the north of the town in the vicinity of Hombrom's Bluff for 25 minutes while the bombers completed their mission. Having escaped the attention of the AA battery, Okamoto's five Zero-sens refueled at "Surumi" (known to the Allies as Gasmata, on the southern coast of New Britain) on the return journey. They carried their drop tanks all the way back to Rabaul, as these were still in short supply.

Four days after this inaugural adventure to Port Moresby, Okamoto assembled a different group of five hand-picked pilots on the morning of 28 February. With good weather again in the offing, he briefed them that this time they would accompany a combined formation of seven G3M2 "Nells" and 11 G4M1 "Bettys" from the 1st and 4th Kokutai, respectively. The "Nells" would be led by Lt Cdr Takeo Oki, while Lt Shigeo Yamada would again command the "Bettys." This was the first joint mission in the South Pacific to mix the two bomber types. The performance of all three types of aircraft was different, and close coordination was required to control air speeds and altitudes.

Okamoto told his pilots that this time they had permission to strafe targets on the ground and in the harbor – in the latter case, flying boats. He instructed that the pilots were to follow him closely. Combat and descent into the town area would require more fuel, and this time all six pilots would jettison their



On 28 February 1942, seven G3M2 "Nell" bombers from the 1st Kokutai were escorted to Port Moresby by six Zero-sens from the 4th Kokutai. Eleven G4M1 "Bettys" from the latter unit also participated in the raid. (Author's Collection)

belly tanks on his cue. The target was a distant 437 nautical miles away, meaning a respectable six-hour return journey to Rabaul. Okamoto would also decide on the way home whether to refuel at Surumi, the halfway point in the return flight to Rabaul.

At around midday the six Zero-sens departed Lakunai, led by Okamoto in F-115, in a formation of three pairs of shotai – Okamoto with FPO2c Kyo'ichi Yoshi'i, shotaicho FPO1c Toru Oshima flying F-109 with FPO3c Seiji Ishikawa, and shotaicho FPO1c Shigeo Fukumoto flying F-112 with Flyer 1c Katsuro Nagatomo in F-113. The Australian radio outpost at Kokoda warned Port Moresby of the incoming formation at 1300 hrs, and 30 minutes later the bombers, and their escort, were over the town. Ishikawa recalled:

> Our focus was to be Port Moresby's flying boats. Okamoto told us that if conditions were favorable we would destroy all 12 machines. His instructions were simple – we would proceed past Kokoda, turn slightly left, then arrive over the area with the town to our right and remain vigilant all over the sky. If no enemy fighters were evident we would attack.

Shortly after breakfast at the RAAF Catalina flying boat station on the edge of Fairfax Harbour, Flt Sgt Albert Bates and others helped disperse the flying boats of Nos. 11 and 20 Sqns by towing three (Catalinas A24-3, A24-6, and A24-7) across the water to the small RAAF workshops and slipway on the shore near Napa Napa. This was routinely done to mitigate against damage during air raids. Once the flying boats were moored, the crews would work on their engines. Bates observed in his diary that the 28th was one of the clearest days he had yet seen at Port Moresby. The crews had just finished sandwiches for lunch when a launch drew up and warned them of an imminent raid, as relayed by the Kokoda outpost. Meanwhile, Okamoto's six fighters headed for the harbor, as he later reported:

RAAF Catalina A24-7 offshore Bowen, on the north Queensland coast, in late 1941, prior to it being strafed by 4th Kokutai Zero-sens in Fairfax Harbour on 28 February 1942. One of four flying boats hit by the A6Ms, this aircraft was so badly damaged that it was towed ashore near the Port Moresby village of Hanuabada and stripped of its engines and parts prior to being scrapped. (Author's Collection)

> The day was an opportunity to truly reveal our fighting spirit. Engines ran smoothly as we headed over New Guinea, passed Kokoda, and then turned left. Fortunately, there was no sign of airborne enemy aircraft. Moresby soon came into sight. We lowered our noses and headed for a bay. Although enemy flying boats were discernible – on our previous visit we saw at least 12 – now there were just three. One other machine was seen inland.

This was the first time the Zero-sen pilots had seen the town from low altitude, and they were initially distracted by the shipwreck of SS *Pruth*, which had foundered on an outer reef on 31 December 1923. After realizing it was only a wreck, Okamoto guided them back north over the town, where they circled and slowly descended, prior to heading west toward the harbor. The IJNAF pilots quickly set course for three RAAF Catalinas moored in the distance barely two miles away, as Ishikawa recalled:

> Unfortunately, when we got there, there were no longer 12 flying boats, only three. Then our commander released his drop tank, and I realized we were going to attack. I slotted into attack formation with purpose, pulling the tank release lever as I did so. My fighter suddenly became much lighter.

By then, an alarmed discussion was taking place between RAAF maintenance personnel working on the wings of the Catalinas as to the identity of the aircraft that were fast approaching them. Initial consensus was they were RAAF Wirraways, but when the "Wirraways" opened fire, six men leapt into the water. By now the Zero-sens were flying line astern, as Ishikawa explained:

> We had gradually lowered our altitude over the town while flying in wide circles, getting down to an altitude of about 60m, with the six fighters lined up in single

file. The first Zero opened fire. Simultaneously, a flying boat in the distance issued black smoke, then started to burn. Then the second Zero opened fire, like a hawk aimed at its prey. My flying boat was already burning, and five or six men were still visible. They appeared to be suddenly sucked downward and swallowed by the sea.

Leading the fighters, Okamoto had been the first to open fire:

My machine guns panned the first machine, followed by the second and third. I hit the central fuselage of one flying boat, and it appeared to buckle. A brutal machine gun attack was underway, with precise intervals staged between the fighters. Four or five crew crawled out of one flying boat and climbed on top of the wing, but they did not jump into the sea and they seemed helpless. They wanted me to leave them alone. I squeezed the grip pattern on my control column, and white smoke arose from the wing. Several fell into the water. Forgiveness clouded my eyes and I prayed for their souls. This was combat, and to ruthlessly kill another human being was unavoidable. Then a land-based machine gun opened fire.

We had engineered this attack by taking advantage of the maneuvrability of the Zero. Looking back at the spectacle, I could see all three flying boats burning with black smoke. One of them already had its nose in the water. So much for the British Empire! I ordered all fighters to return home. Destroying flying boats in this manner doesn't count as real combat. Nonetheless, our battle-tested Zeros responded beautifully and demonstrated extraordinary maneuvrability.

A launch hurried to rescue the RAAF groundcrew in the water, and Electrician LAC Rod Nancarrow was among several hauled aboard. Moments later, however, two Zero-sens returned for another pass and he was badly wounded. A second launch arrived to rescue more crew, and in the confusion of the strafing attack Nancarrow fell overboard and was never seen again. Electrician LAC William Franke was also badly wounded. Catalinas A24-3 and A24-6 were left blazing and they eventually sank, while A24-7 and A24-18 were damaged by gunfire. The former was eventually towed ashore and stripped of its engines and parts prior to being scrapped.

Ishikawa recounted the Zero-sens' departure from Port Moresby:

Black smoke was still visible as we climbed over the Owen Stanley Mountains. I recall vividly that my chest was pounding as I climbed away, but then I noticed we were lacking a friend. It was Katsuro Nagatomo, a young and excellent pilot, but it appeared his Zero had been torn apart by ground fire. He was often remembered later when we ventured down the "Moresby Highway." These were still the days of the bombers, and engaging with enemy fighters was yet to ensue.

Okamoto's pilots had expended all of their 20mm ammunition (110 rounds per aircraft), and most of their 7.7mm rounds (500 in total) too. The diary of Port Moresby's 23rd Heavy Anti-Aircraft Battery described the raid as follows:

Six fighters over Moresby. Fighters' maximum height 500ft. Machine-gunned Catalinas in harbor and then flew off. No. 1 Station engaged bombers flying at height of 20,400ft – rounds burst very close . . . same flight engaged again on

The arrows added to this 1941 photograph of Port Moresby, taken from Tuaguba Hill, show the flightpath of the first offensive land-based Zero-sen operation undertaken in the Pacific on 28 February 1942. The fighters passed overhead Paga Hill in the distance, while the location of the RAAF Catalina base is circled. Flyer 1c Katsuro Nagatomo was shot down in 4th Kokutai Model 21 F-113 on this mission. (Author's Collection)

> run-up to bomb either No. 1 Station or Catalina base. Immediately rounds burst, bombers changed course and flew out over Bootless Inlet. Flight came in again at 20,000ft and No. 1 Station again engaged. Rounds were observed to burst amongst formation, forcing it to break up. One airplane observed to roll over to starboard and fly irregularly, apparently damaged. Bombers then flew off. Total numbers of rounds fired – 47. During bombing of aerodrome, ordnance fell close to No. 2 Station. Height was always too great for three-inch guns to engage.

Four "Nells" had indeed sustained hits from the 23rd Heavy Anti-Aircraft Battery's No. 1 Station, and Nagatomo's Zero-sen, F-113, was hit by bullets from a Lewis machine gun placed on a ridge behind Napa Napa. Nagatomo guided his damaged fighter out to sea with the others, then turned north for home. As he approached the coast east of Port Moresby at 1330 hrs, and with flames spreading, his Zero-sen fell into a vertical dive and crashed just off Loloata Island, eight nautical miles from where it had been hit. Moments earlier, despite having been badly burned, Nagatomo bailed out. He was soon rescued by 39th Battalion soldier Jim Waters and taken to the mainland opposite the island.

Hailing from Miyazaki Prefecture in Kyushu, the badly injured Nagatomo was treated at the hospital at Murray Barracks. He was eventually evacuated to Australia on the evening of 5 March via Catalina A24-1, undertaking the return leg of its routine 24-hour service to Rathmines, in New South Wales. Seated down the back of the flying boat for the long journey, the bandaged Nagatomo, who was propped up on a bunk, shared the Catalina with 22 curious Australians. Once they had landed at Rathmines, the injured pilot was flown south to Melbourne for additional burns treatment and interrogation.

Nagatomo, the first Japanese pilot to bail out over New Guinea, later befriended the nurse tending him in Australia and also developed a respectful relationship with the hospital chaplain. He responded freely to questions, and a series of detailed interrogations provided insight into the 4th Kokutai's early days at Rabaul. He was later interned at Cowra PoW Camp in New South Wales.

CHAPTER 2

SETTING THE SCENE

This propaganda photograph features groundcrew with two of the three first land-based Zero-sens shipped to the South Seas on 25 January 1942 aboard the merchantman *Meiten Maru*. Both Model 21s, still with their aerial masts in place, previously served with the Chitose Kokutai at Roi. In the background can be seen several A5M "Claudes" assigned to the Kawai Butai. (Author's Collection)

The arrival of the first land-based Zero-sens in the "Nanto Homen" – the South Seas theater – was innocuous enough. On 25 January 1942, the merchantman *Meiten Maru* sailed from Yokosuka via Guam and Truk to deliver three A6M2s to Rabaul, where the crated fighters were unloaded onto a wharf. All three airframes had previously served with the Chitose Kokutai at Roi, in the Marshall Islands.

The origins of land-based Zero-sen operations in New Guinea and the Solomons can be traced back to 27 November 1941, when the merchantman *Goshu Maru* delivered Lt Harutoshi Okamoto and 14 pilots to Truk Atoll, in the central Pacific, to serve as the Chitose Kokutai's fighter butai. Following

An IJN lieutenant from the 7th Construction Unit marches alongside personnel under his command near Lakunai airfield in mid-1942. The IJNAF made continual improvements to the former RAAF airstrip to make its single runway more suitable for Zero-sen operations. (Author's Collection)

the capture of Rabaul on 23 January 1942, the Imperial Japanese Navy (IJN) decided that the town deserved its own land-based unit equipped with both fighters and bombers. This resulted in the formation of the 4th Kokutai at Rabaul on 10 February 1942. Thirty-nine pilots were assigned to the unit's fighter wing, and only six would survive the war. Many of them were killed in the first half of 1942 in a fiercely-fought campaign for control of New Guinea, and the rate of attrition amongst Zero-sen pilots worsened with the commencement of the Guadalcanal campaign in August of that year.

Following the occupation of Rabaul, the IJN's 7th Construction Unit upgraded the former RAAF grass runway at Lakunai, with the 1,500m x 100m airstrip being ready for use by the afternoon of 25 January 1942. Further expansion works and wooden accommodation blocks were planned for construction by mid-February.

On 31 January Okamoto led 15 A5M4 "Claude" fighters of the Chitose Kokutai from Kavieng down to "Rabinkikku" – the Japanese name for Lakunai. Okamoto was arguably the most influential Zero-sen pilot to serve in the South Seas theater, leading the 4th Kokutai fighter wing for its entire short duration at Lakunai. As already detailed in the first chapter, he led both landmark missions against Port Moresby on 24 and 28 February 1942. Okamoto's detailed post-war memoirs give priceless insight into both his experiences and the operational problems the fighter wing faced. His efforts were later reflected in the tactics of the Tainan Kokutai when it assimilated the entire 4th Kokutai fighter wing at Lae and Rabaul on 1 April 1942.

The 15 "Claudes" led by Okamoto were flown by FPO1c Shigeo Fukumoto, FPO3c Kiyoji Ishikawa, FPO2c Unichi Miya, Flyer 1c Tamio Kobayashi, FPO3c Keiji Kikuchi, Sea1c Take'ichi Kokubun, FPO1c Yasuharu Noya,

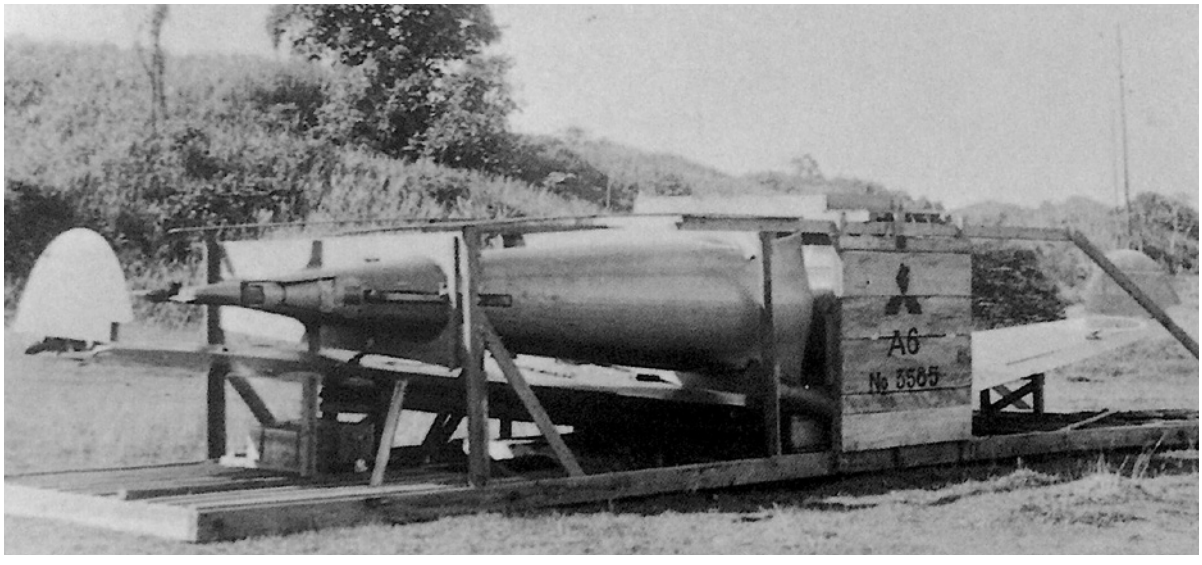
IJNAF officers hand out mission sheets to G4M1 "Betty" crews from the 4th Kokutai at Vunakanau, this unit having originally been equipped with both fighters and bombers. However, the 4th Kokutai's fighter wing was assimilated into the Tainan Kokutai on 1 April 1942. Despite now being independent of the "Betty" unit, Zero-sens continued to routinely undertake escort operations for G4M bombers in the South Seas theatre. (Author's Collection)

FPO1c Hiroyoshi Nishizawa, FPO1c Genkichi Oishi, Flyer 1c Jufuku Tanji, FPO3c Sachihisa Tan, FPO2c Takuro Yoshi'e, FPO2c Kyoichi Yoshi'i, and FPO1c Satoshi Yoshino. Lt Shiro Kawai and his subordinate, FPO2c Masayoshi Yonekawa, greeted the new arrivals at Rabaul, having just arrived by ship. Many of these aviators would subsequently serve with the Tainan Kokutai, including the most famous South Seas Zero-sen pilot of them all, Hiroyoshi Nishizawa. Okamoto was later recalled to Japan when the wing was incorporated into the Tainan Kokutai, leaving 4th Kokutai to exclusively operate G4M1 "Bettys."

In the days immediately prior to the "Claudes" arriving at Lakunai, the three Zero-sens that had preceded them were reassembled and then issued to the Okamoto Butai. 1 February was put aside to service the A5M4s, and the next day Okamoto instituted a series of 38 overlapping aerial patrols, lasting 90 minutes, from dawn to dusk. These were flown in pairs, with aircraft operating at between 10,000–16,000ft. The arrival of land-based fighters allowed the floatplanes from *Kiyokawa Maru* to stand down their defense of Rabaul. Instead, they would now undertake patrols that ventured out some 300 nautical miles from the town.

Six new, crated, Nakajima-built A6M2s arrived at Rabaul's wharf courtesy of the carrier *Shoho* on 17 February, and they were all assigned to the Okamoto Butai. Shortly thereafter, the 4th Kokutai became known locally as either the "F Kokutai" because of the letter "F" unit tail prefix applied to both bombers and fighters alike, or the "Mortima Kokutai" after hikocho Capt Yoshimitsu Moritama. Now fielding a full chutai of nine A6M2s, the Okamoto Butai was subsequently credited with giving land-based Zero-sens their combat debut in-theater.

On 1 April the 4th Kokutai fighter wing at Lae was morphed into the Tainan Kokutai, being joined later by the 2nd Kokutai at Buna. Defensive operations by fighters flying from Lakunai safeguarded Rabaul and its airfields from raids by increasing numbers of Allied bombers, including B-17 Flying



A crated A6M2 awaits assembly at Rabaul in early 1942. New Zero-sens arrived in New Guinea either crated like this one, already assembled and then craned off from auxiliary transports or flown in directly via Kavieng from light carriers sailing off the coast. (Tony Holmes Collection)

Fortresses. Zero-sen pilots were particularly vexed by the four-engined Boeing bomber from the outset, largely due to its exploits in the doomed defense of the Philippines. The B-17 would prove hard to bring down, with the first example not falling to land-based Zero-sens in the South Seas until 7 August 1942 during a raid on Rabaul. FPO3c Kyoji Ishikawa was awestruck by the Flying Fortress when he first encountered the bomber:

> Suddenly, the air raid warning sounded. We had just received Zero fighters as reinforcements, so we scrambled in those. It did not take long to find the enemy in cloud, however. It was the first time I had seen this model, and despite the aircraft's huge size, its performance at high altitude was excellent and it was hard to catch. Following it, I realized it was a Boeing. So, the unconquerable Fortress has finally come to Rabaul! It shone in the morning sun, and it even looked beautiful. The enemy gunners opened fire from a considerable distance, perhaps 1,000m. The tracers, like a long train, flew straight and then left and right before I thought they would hit me. I opened fire too, but it was difficult to hit. I thought about this later, and decided that the Boeing's huge size made it so difficult to judge the range. Nobody came home with reports of accurate shooting, and we all had experienced similar difficulty in judging the range. This important and challenging matter was left as one to be resolved.

The B-25 Mitchell and B-26 Marauder made their combat debuts in-theater on 6 April 1942, and by the end of June, 19 of the former and a score of the latter had been lost to all causes. An inaugural series of B-26 attacks on Rabaul ceased at the end of May, leaving Lae as the main target. Just 188 miles north of Port Moresby, and home of the New Guinea-based Zero-sens, Lae could be reached by all bomber types in the Allied inventory. The USAAF quickly realized that Mitchells attacking from low to medium altitudes achieved better results through greater accuracy than high-altitude bombing by Flying Fortresses. However, the loss rate to Zero-sens proved considerable, as demonstrated by the

An aerial view of Lae airfield taken in May 1942 by a USAAF F-4 Lightning from the 8th Photo Reconnaissance Squadron. A handful of Tainan Kokutai Zero-sens are parked between the runway and taxiway, pilots often being forced to land on the latter due to bomb damage inflicted by RAAF and USAAF aircraft. (Author's Collection)

destruction of five B-25s by the Tainan Kokutai during a mission against Lae on 25 May.

The threat posed by the Allied fighter inventory was also on the increase, although the Tainan Kokutai was more than capable of dealing with this. Nevertheless, the official record of the RAAF Kittyhawk IAs of No. 75 Sqn in the unit's defense of Port Moresby in 1942 is at first glance impressive – 22 enemy aircraft destroyed in combat. In reality, however, the Australian pilots only shot down six. IJNAF claims against the RAAF unit were equally profligate and inaccurate. No. 75 Sqn had been destroyed as a fighting force by the beginning of May, with 20 Kittyhawk IAs having been lost in the previous two months.

By then, USAAF P-39/P-400 Airacobras had made their combat debut (in early April) in the defense of Port Moresby, and they too were suffering increasing attrition. An astounding 59 Airacobras had been destroyed by 18 June – a rate of one per day. Whilst more were lost to operational causes (including weather) than to Zero-sens, an ameliorating factor was that most engagements were fought over friendly territory, thus allowing many downed Allied pilots to return to their units.

From mid-June IJNAF bombers began to focus their attention on Port Moresby's harbor and modest wharf facilities. Merchant ships were exposed to light bombs, and the freighter MV *Macdhui* was sunk on 18 June. All such missions saw the bombers escorted by Zero-sens from the Tainan Kokutai, whose skilled pilots provided a stout defense. Their fighter repeatedly proved superior in aerial combat, with Zero-sens continuing to claim more B-25s and B-26s targeting Lae. Nonetheless, 21 A6M2s had been lost by the Tainan Kokutai by the end of June, along with 14 pilots.

During this initial series of aerial engagements in the skies above New Guinea, the Zero-sen's maneuvrability combined with the discipline, teamwork, and experience of the pilots flying the aircraft often meant the Tainan Kokutai prevailed over its Allied opponents. As RAAF and USAAF fighters increased in number during 1942, IJNAF Zero-sen pilots found that coordinating combat in three-aircraft shotai proved challenging due to the lack of radios in their A6M2s. Instead, they were forced to keep a keen lookout, and relied on a combination of hand gestures and airframe movements to communicate. When engaging bombers, Zero-sen pilots often abandoned shotai tactics in

The volcanoes of Mount Tavurvur (front right) and Mount Komvur (left) dominate this view of Rabaul and nearby Simpson Harbour. Lakunai airfield (center left) is shrouded in smoke from a recent Allied air attack. (Tony Holmes Collection)

their pursuit of Mitchells and Marauders. With their attention focused on fleeing bombers, Airacobra pilots with a height advantage downed single Zero-sens on 1 and 16 June.

The air campaign in the South Pacific grew in intensity from May 1942, with heavy attrition being suffered by both sides as a result. In the first six months following the occupation of Rabaul, the Allies lost 272 aircraft and 288 men, while the IJNAF lost 198 aircraft and 375 men.

Just as the air war in-theater began to settle into a pattern, with the Allies targeting Lae and the IJNAF attacking Port Moresby, the Japanese were badly caught off guard in the Solomons. The Guadalcanal campaign would significantly change the nature of Zero-sen losses and tactics. Japanese ambitions following the successful invasion of Port Moresby in Operation *MO* in early May 1942 were the capture of Midway and the destruction of the US Navy's Pacific Fleet carriers. These advances were to be followed in July by Operation *FS*, which would have seen Fiji and Samoa captured and Australia isolated from the US.

However, following the Allied strategic victory in the Battle of the Coral Sea in early May, Operation *MO* was changed from an amphibious assault to an advance over the Owen Stanley Ranges from July. An IJNAF proposal to build an airfield on Guadalcanal, in the Solomons, was approved on 13 June, its construction being viewed as useful for long-range bombers flying from here would be able to threaten Allied vessels as part of Operation *FS*.

The subsequent investment of men and materiel in the building of the airfield – referred to as "Runga" by the Japanese and given the codename RXI – on Guadalcanal culminated in the IJN high command visiting the island on 19 June. The "Inspection Party" was transferred across Sealark Channel from Tulagi to Guadalcanal, where they became the guests of platoon leader

Japanese war correspondent Hajime Yoshida took this photograph of Tainan Kokutai Zero-sens taxiing at Lae in late May 1942. He was looking eastward over Huon Gulf at the time, with the wrecked pre-war hangar that was previously used by Guinea Airways visible in the background. This structure was subsequently patched up and pressed into service as a workshop by hardworking IJNAF groundcrew. All the fighters are equipped with centerline drop tanks, each capable of carrying 330 liters of fuel. The fighter's internal tanks had a capacity of 518 liters. (Tony Holmes Collection)

WO Takeuchi Noboru and his camp near the gray sandy shoreline. Included within their number was Vice-Admiral Shigeyoshi Inoue (Commander of the Fourth Fleet), Rear Admiral Sadayoshi Yamada (Commander of the 25th Air Flotilla), Capt Shigetoshi Mitazaki (hikocho of the Yokohama Kokutai), and Lt Cdr Tokujiro Okamura (the 11th Air Fleet's chief Engineering Officer).

Barely two weeks before this visit, and with plans to develop "Runga" as a base for the Zero-sen-equipped 6th Kokutai, the IJN's heavy defeat at the Battle of Midway meant that there were no carriers available to support Operation *FS*. The airfield on Guadalcanal now became crucially important to Japanese plans in the South Pacific. Rather than relying on carrier-based air power, the IJNAF now proposed that land-based air operations from "Runga" would assist planned advances to the New Hebrides and New Caledonia, then on to Fiji and Samoa.

With the clarity of hindsight, it can be seen that this was a turning point in the Pacific War. Although its advances had been curtailed, Japan did not switch to a defensive strategy. Preoccupied with progressing an offensive agenda, it was taken by surprise when the US Marine Corps' 1st and 5th Marine Divisions, supported by air power, conducted an amphibious assault upon the islands of Guadalcanal, Tulagi, and Florida in the southern Solomons on 7 August.

The expansion of IJNAF operations into this area in the wake of the invasion of Guadalcanal presented Zero-sen pilots with significant problems, for their aircraft lacked navigation aids and there were no reliable maps available. The success of a mission now rested on the navigational skills of the lead pilot. Under the exigencies of combat, order was often abandoned, leaving leaders in a state of confusion and pilots left to fend for themselves.

Due to the paucity of functioning radios, visual flying remained the order of the day, and this in turn resulted in a number of operational losses. On several occasions, gaggles of Zero-sens simply disappeared in capricious weather during the long overwater flights to or from Guadalcanal. Morning fog often delayed or precluded timely departures, which meant pilots then had to deal with building cumulus that caused showers and often developed into storms later in the day. Descending through breaks in such conditions without knowing what lurked beneath the cloud was a deadly gamble.

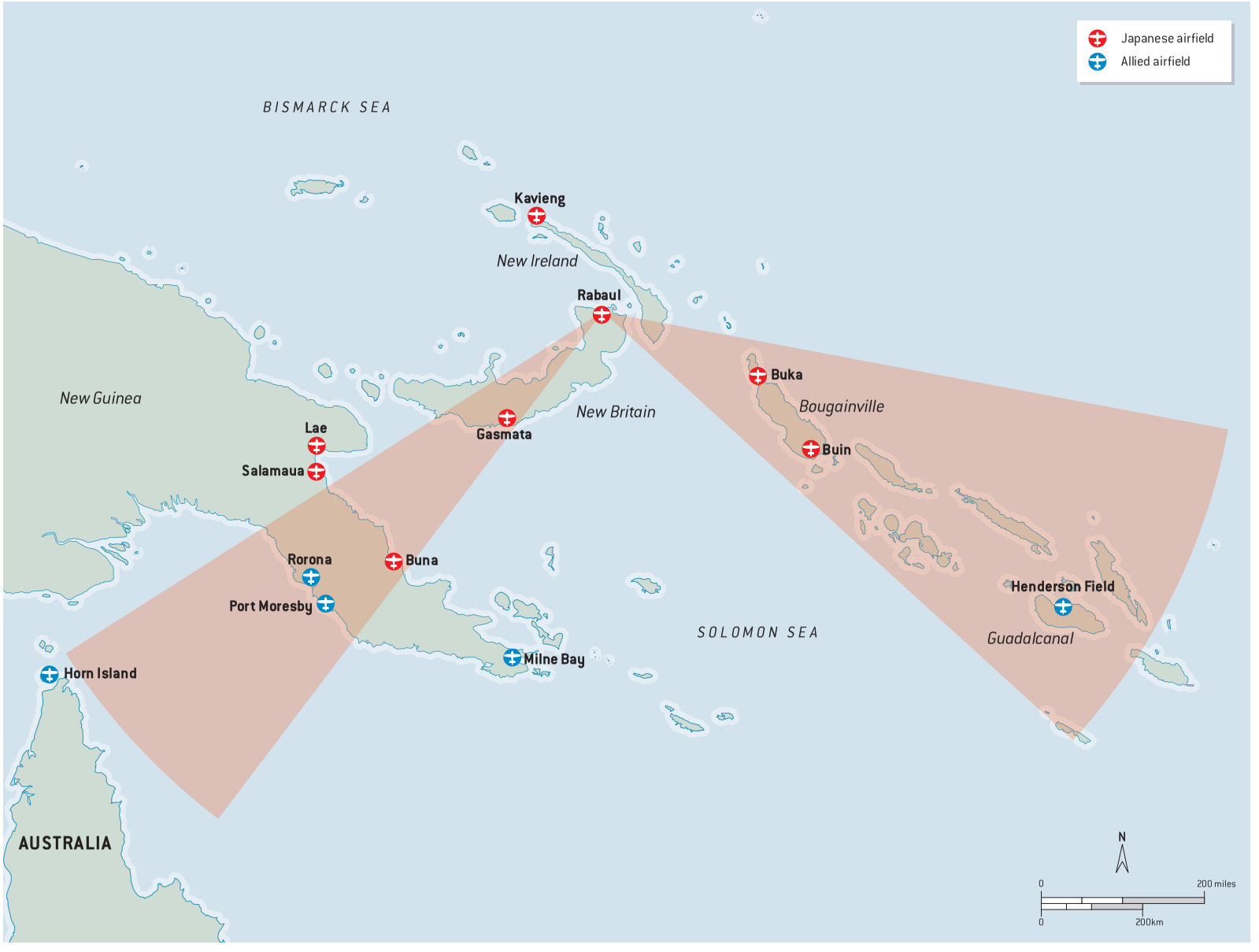
One such pilot to fall foul of poor climatic conditions was Flyer 1c Shigejirou Murakami of the 6th Kokutai who became disorientated on 11 September

This aerial view of Henderson Field was taken shortly after it was seized by US forces in August 1942. The airstrip, known to the IJNAF as "Runga" in Katakana (and which carried the codename RXI), had been completed by personnel from an IJN construction battalion just days prior to its capture by the US Marine Corps. (NHHC)

1942 during the unit's first mission to Guadalcanal. Losing contact with the main body of fighters after attacking a B-17, Murakami ran into bad weather on his way home to Rabaul. He eventually ditched off Kitava Island, in the Trobriands, some 35 degrees off track. Although Murakami avoided being captured for a month, he was eventually shot dead by Australian soldiers when he refused to surrender. Zero-sen pilots downed in the Solomons could confidently anticipate being trussed up by hostile tribesmen and handed over to Allied coastwatchers. The more unlucky were beheaded.

Despite the loss of Murakami and a number of other Zero-sen pilots to weather, overall, the IJNAF fighter force incurred substantially fewer losses to poor conditions than their opponents. Time and again, Allied pilots flew into storm fronts that their more cautious and better-trained IJNAF counterparts avoided at all cost thanks to their superior ocean navigation training.

As Guadalcanal loomed as an intractable problem for the Japanese, it initiated construction of an airfield at Buin, on Bougainville's southern coast. Not only was the location closer to Guadalcanal than Rabaul, it was adjacent to the floatplane base at Shortland Islands and the anchorage at Tonolei Harbour, both of which warranted close protection. Coastwatcher PO Paul Mason of the Royal Australian Naval Volunteer Reserve reported its construction on 23 September, radioing that hundreds of conscripted locals were working on building an airfield, supported by vehicles, horses, motorcycles, tractors, and other miscellaneous construction equipment.


Japanese airfield
Allied airfield
BISMARCK SEA
Kavieng
New Ireland
Rabaul
New Guinea
New Britain
Gasmata
Lae
Salamaua
Buka
Bougainville
Buin
Rorona
Buna
Port Moresby
Henderson Field
SOLOMON SEA
Guadalcanal
Milne Bay
Horn Island
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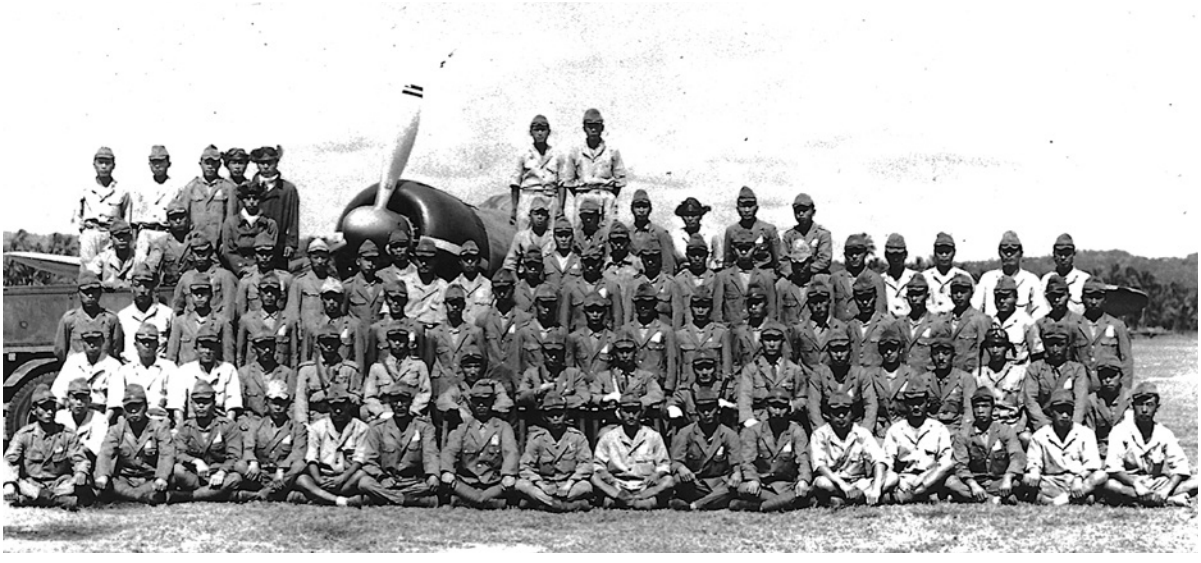


That same month Ballale Island was also surveyed, the IJNAF hoping that it would prove suitable as the location of a force-multiplier airfield for Buin. On 26 November some 370 men of the IJN's 18th Naval Construction Battalion would land there, and by late December another operational IJNAF airfield commenced operations.

While the exploits of the Tainan Kokutai continue to dominate contemporary accounts of the South Seas air war, the Guadalcanal campaign also spurred the involvement of unheralded Zero-sen units. In addition to the pace set by the pilots of the 4th, Tainan, 2nd, and 6th Kokutai, three more fighter units also served in-theater in 1942. The fighter wing of the Kanoya Kokutai was ordered to Rabaul from Malaya, transiting Kavieng on 19 September. On 1 October it had received additional Model 21s to bolster the wing's strength to 24 A6M2s. On that same date, and one month in advance of a wider IJNAF restructure, it became the fighter wing of the 751st Kokutai. On 1 November it was redesignated the 253rd Kokutai, becoming a group in its own right. Cdr Yoshito Kobayashi was appointed hikotaicho and the new kokutai had its authorized strength increased to 48 Zero-sens and four Ki-46 "Dinah" reconnaissance aircraft.

Eight days later, the 252nd Kokutai also arrived in-theater when the carrier *Taiyo* docked at Rabaul and off-loaded five A6M2s and 21 A6M3s.

Some seven weeks prior to this, as the Guadalcanal maw consumed more and more Zero-sens, two chutai of the 3rd Kokutai were shipped to Kavieng from the Netherlands East Indies (NEI) theater aboard *Taiyo*. Arriving on 17 September, they were then flown on to Rabaul. This detachment comprised 26 pilots, 21 Model A6M2s, and four C5M2 "Babs" reconnaissance aircraft. Hikocho Lt Cdr Kiyoji Sasakibara commanded the detachment, which flew its first operational mission on 22 September. Serving for seven weeks in the South Seas, the detachment was redesignated the 202nd Kokutai on 1 November and withdrawn from Rabaul one week later after sustaining severe losses.

Two chutai of the NEI-based 3rd Kokutai reached Rabaul in September 1942. Hikocho Lt Cdr Kiyoji Sasakibara (seen here sat in the second row, eighth from the left) commanded the detachment, which flew its first operational mission on 22 September. (Tony Holmes Collection)

OPPOSITE

From late January 1942, the two main IJNAF airfields at Rabaul were Lakunai and Vunakanau. Salamaua and Gasmata were subsidiary bases, and Buka was used as an emergency airstrip only from early August until the end of that month, when Zero-sens from the carrier air groups embarked in *Zuikaku* and *Shokaku* briefly undertook conventional operations from here. Buin was not operational until October 1942. The red overlays show the theoretical maximum range of the A6M2 from Rabaul, although in order for the aircraft to cover such long distances pilots would have to experience no aerial combat and enjoy good weather. Typically, Zero-sens struggled to reach Guadalcanal from Rabaul, where their combat time was usually constrained by limited fuel reserves.

CHAPTER 3
PATH TO COMBAT

A popular Allied conception which grew during World War II was that Imperial Japan's manifestly hierarchical structures produced overbearing commanders who demanded unswerving obedience. Yet throughout the 1942 air war, vibrant examples of individualism were displayed by IJNAF flyers. The Zero-sen pilots who served in the South Seas were an elite cadre who maintained high morale against the odds and abounded with individual characters. Some combat orders were interpreted generously by chutaicho more as a handy list from which to concoct more imaginative solutions, rather than rigid instructions.

In a salute to the profession of the fighter pilot, nonconformist sartorial accoutrements such as scarves, belt buckles, and personal cameras accompanied pilots on missions. Zero-sen pilot ranks were studded with colorful characters from all walks of life. For example, FPO3c Toshiaki Honda of the Tainan Kokutai had been a tram ticket collector in Fukuoka Prefecture prior to his military enlistment, his previous employment reflecting thousands like him whose origins lay in basic working class roots following minimal education.

Much idealism was portrayed in Japan's newspapers and magazines about the success of the "Umiwashi" ("sea eagles"), as IJNAF pilots were termed. Beneath this popular image lay arduous training and the instillation of the warrior ethos. Both were pervaded by a powerful and entrenched caste system, as described by Tainan Kokutai ace FPO1c Saburo Sakai in his Japanese-language memoirs. Sakai notes that he often gave inspirational speeches before departure, sometimes asking the men if they knew which war they were fighting. "One against America and one against Britain" was the common response, to which he would then shout back:

> You idiots! There is but one physical enemy out there, but there is another in your face right here on our own side. It's the officers from Eta Jima! In our homeland even in peacetime, we're oppressed and tyrannized by them just because of their superior rank. Luckily, this Pacific War, despite its misfortunes, gifts us a chance which comes but once every thousand years. Who is stronger?

> The non-commissioned pilots who have fought their way up from the lower ranks, or them? We don't know whether we will win this war, but if we lose to them, we'll continue to be despised. The Gods have given us a golden opportunity to show who is stronger and more skilful.

Distinctions by rank were observed at all IJNAF flying schools, where non-commissioned officers with considerable experience became flying instructors for both officers and NCOs alike. Sakai observed:

> Because they were honorable lieutenants, they would shout at us, "Hey you, how am I progressing?" The low-ranking instructor would be required to answer. "You are doing exceptionally well, honorable lieutenant". That was all you could say, which made it difficult to instruct them properly.

Former Tainan Kokutai pilot FPO1c Saburo Sakai wrote about his South Seas combat post-war, although the English-language version, titled *Samurai!*, of 1957 was altered to such an extent that much of it is considered to be wildly inaccurate by modern historians. On the other hand, his Japanese-language volume is both accurate and detailed. Sakai, who saw considerable combat over New Guinea and the Solomons, has been credited with 64 victories, although it has been asserted that only 28 of these are officially recorded. His proven score over New Guinea and the Solomons was 5.3 victories on the basis some kills were shared with other pilots. (Tony Holmes Collection)

Although such friction between the ranks undoubtedly inspired competition, it also caused resentment amongst NCO instructors because it ignored the ancient Japanese proverb, "Never step on your teacher's shadow; always step three paces behind as a sign of respect." Nevertheless, this rigid caste system was often tempered in the field as pilots shared in the common experience of combat, which was no respecter of rank. The officer cadre also observed strict relative seniority amongst themselves. For example, a lieutenant who had graduated from flying school several months prior to a fellow officer serving with the same unit held seniority.

The majority of the pilots flying the Zero-sen in 1941–42 had received tuition in biplanes through to the advanced training phase of their course. Graduates had initially flown A5M "Claude" monoplanes from the start of their operational careers, and many of them had seen combat in that type in China prior to converting to the Zero-sen. A small number of A6M pilots sent to the South Seas had also acquired combat experience with the Zero-sen in China.

Whilst those with combat experience should have enjoyed an edge over their compatriots yet to see any action, this was not necessarily the case. Formation drills and inflexible combat techniques were emphasized to all Zero-sen pilots in the period leading up to the Pearl Harbor strike of 7 December 1941. The land-based 3rd and Tainan Kokutai and the fighter wings of the Chitose and 4th Kokutai had been heavily drilled in formation tactics by the commencement of the Pacific War, thus bestowing a unique, albeit rigid, skill set upon all A6M pilots.

Lt(jg) Tetsuzo Iwamoto fought for two years in China, and he is acknowledged as the IJNAF's top-scoring Zero-sen pilot of that conflict. Astute and adaptable, after he arrived in the South Seas, Iwamoto was inclined to learn new skills while drawing on old ones – a quality which enabled him to become a highly effective Zero-sen pilot in this theater also. Other China veterans who had flourished by fighting more antiquated Hawk IIIs, I-15s, and I-16s were serving as instructors when the Pacific War began. When they later transferred

The officer cadre from the Tainan Kokutai pose for a photograph on Jolo Island, in the Philippines, in January 1942. In the front row, second from left, is WO Gitaro Miyazaki, who was killed fighting with Airacobras west of Port Moresby on 1 June 1942. In the second row, second from left, is the Tainan Kokutai's Executive Officer, Cdr Yasuna Kozono, and to his left is the unit CO, Capt Masashita Saito. At the extreme right in this row is Lt(jg) Hideki Shingo, whilst in the back row, fifth from left, is high-scoring ace Lt(jg) Jun'ichi Sasai. Both men would see considerable action over New Guinea, with Sasai being killed during the early stages of the Guadalcanal campaign. (Tony Holmes Collection)

to Rabaul, many found it challenging to adapt to the alien and unforgiving environment in the South Seas. Unlike Iwamoto, many quickly became combat victims simply because they had failed to adapt.

In the end, the South Seas Zero-sen pilots bonded as a cadre more through common purpose and shared experiences than military discipline, with the top commanders all earning high praise and respect from those they guided in to battle. The conduct of Tainan Kokutai hikocho Capt Masahisa Saito and hikotaicho Lt Cdr Tadashi Nakajima earned them both admiration and respect from their Zero-sen pilots. Equally esteemed was 2nd Kokutai hikocho, Cdr Sakae Yamamoto, who had previously served with the obscure floatplane-equipped 17th Kokutai. Yamamoto, immediately identifiable by his broad grin, carried instant authority, and could be relied upon to make hard, but sensible and considered decisions.

Yamamoto's 2nd Kokutai was formed in Yokosuka on 31 May 1942 as a mixed carrier dive-bomber and fighter unit, being assigned 16 D3A "Val" dive-bombers and 15 Model 32 Zero-sens. These aircraft reached Rabaul on 6 August on board the escort carrier *Unyo*, whereupon they were flown off to nearby Lakunai. The fighter wing's buntaicho was Lt Yoshio Kurakane, who led all 15 Model 32s on the unit's first mission the following day. The limited range of the A6M3 meant the 2nd Kokutai did not participate in the early Guadalcanal campaign, its pilots instead being confined to operations over New Guinea or in the defense of Rabaul. In late 1942 the unit would finally see action in the Solomons when it used Buka as a forward base, often flying alongside the Tainan Kokutai.

Hikocho of 6th Kokutai, Capt Chisato Morita, similarly commanded ample respect. Following the surprise invasion of Guadalcanal on 7 August 1942, his unit was ordered at short notice to Rabaul from Kisarazu, in Chiba Prefecture. As previously noted, it had been envisioned that the unit's Zero-sens would be stationed at the new airfield at "Runga" on Guadalcanal. Such plans were scuppered when the US Marine Corps captured the base.

Fully aware of what awaited his unit in the Solomons, Morita sent only experienced pilots in the advance detachment to Rabaul. The 19 Model 32s ferried to Lakunai were led by Lt Mitsugu Kofukuda, and they all reached Rabaul on 21 August. Guided by two G4M1 bombers, they had flown via Iwo

Jima, Saipan, and Truk in a landmark long-distance navigation feat for IJNAF fighters. This advance detachment was soon involved in attacks on Rabi (Milne Bay), Guadalcanal and, on 6 September, a significant and substantive combined strike against Port Moresby that saw Kofukuda lead nine Zero-sens into action. He was later promoted to become the unit's hikotaicho.

The balance of the 6th Kokutai Zero-sens that had remained in Japan arrived at Rabaul on 7 October aboard the carrier *Zuiho*. Led by firebrand Lt Zenjiro Miyano, this reinforcement of 27 fighters comprised both Model 21s and 32s. From Rabaul, Miyano took his contingent to Buka, from where the unit made its first patrol on 8 October 1942. Over the next few days the 6th Kokutai increased its strength at Buka to 24 Zero-sens, at which point it commenced offensive operations. On 15 October, Miyano's contingent at Buka redeployed southwards to Buin, having been brought back up to full strength (24 aircraft) following the loss of five Zero-sens to capricious weather four days earlier. Miyano was another individualist and much-venerated chutaicho who became a highly effective tactician, modifying Zero-sen maneuvres to better suit operations in the South Seas theater.

Ace Lt Zenjiro Miyano of the 6th Kokutai led 27 fighters from the carrier *Zuiho* ashore to Rabaul, and then on to Buka, in early October 1942. An astute tactician, he pioneered the transition from three- to four-fighter shotai, the latter consisting of tactical pairs. He fought in the Solomons campaign with the 6th (later 204th) Kokutai until his death in action on 16 June 1943. (Author's Collection)

In the end, whilst combat over New Guinea inflicted a substantial toll on Zero-sen pilots, it was Guadalcanal that finished off the remaining balance of the original cadre to arrive in-theater during the spring and early summer of 1942. The seven-month-long Guadalcanal campaign wore down the élan and esprit de corps which was initially so ubiquitous among IJNAF land-based fighter units. Numerous aerial battles cost the 11th Air Fleet (which controlled all IJNAF aircraft in the South Seas theater) much of its skilled fighter force, and by year-end flagging morale had become a serious issue, exacerbated by disproportionate poor health and disease.

Of course, these diminutions were not the exclusive domain for either belligerent, but the Japanese suffered more than their Allied counterparts. The health of the entire Rabaul garrison started to decline from January 1942. Lingering ailments which permeated Rabaul, Gasmata, Lae and, later, Buka included tuberculosis, respiratory conditions, and parasitic infections. The two most common and debilitating diseases were vivax malaria and dengue fever. The majority of Zero-sen pilots suffered at least one bout of either of these cyclical maladies during their tours.

Resulting poor health constrained combat effectiveness, with pilots particularly struggling to cope with the physical exertion required during the lengthy missions to the Solomons or ferry flights to Lae or Buka from Rabaul. Maintaining formation safely over long distances meant hours of tedious concentration, with the price of inattentiveness being severe. Pilots would sometimes fall asleep during such missions, their fighters climbing slightly before falling off into a dive. Usually aviators came to before impacting the water, but in a few cases they did not.

Fortunately for poorly pilots in the South Seas theater, both IJN hospitals at Rabaul boasted some of the best facilities outside Japan, tended by a generous

A wounded Zero-sen pilot is given first-aid before being transferred to the main IJN hospital near Rabaul in early 1942. Housed in a colonial-style wooden building, the hospital was affectionately nicknamed 'the church' by Japanese servicemen. (Author's Collection)

cadre of skilled and crisply-dressed female nurses in white uniforms who would line up each morning for a parade followed by calisthenics in front of the hospital that overlooked Blanche Bay. Located in a colonial-style wooden building just inland from Rabaul, and capped with a Christian spire, the main hospital was affectionately nicknamed "the church." Wounded pilots who were admitted were assured of the best medical attention, or evacuation back to Japan by H6K "Mavis" flying boat if required.

Pilot accommodation and attendant facilities at Rabaul were rudimentary. Officers including and above the rank of substantive lieutenant were housed two or three to a room in wooden barracks not far from Lakunai. Ensigns resided in ample tents, while lower ranks shared smaller, more crowded tents which regularly quartered eight or more. However, at frontline airfields such as Lae and Buka, all pilots shared tents, where trying conditions and Allied bombing raids made sleep difficult, which thus exacerbated fatigue.

Every Zero-sen pilot was acutely aware that their Allied counterparts enjoyed regular leave breaks. There was no such respite in the IJNAF, whose pilots bore the inexorable strain of relentless combat. Under such circumstances it is understandable that a small number of them refused to continue flying combat missions, or stated that they no longer wished to. In such cases, pilots were susceptible to facing a court-martial, although the reality was that those clearly unable to function due to stress were quietly evacuated back to Japan.

A wooden building that sat on stilts on the edge of Lakunai airfield was regarded as "fighter central" by the Zero-sen cadre. Its roomy veranda facilitated expansive views of airfield activity against the backdrop of the active volcano of Tavurvur that regularly rumbled across the blue-brown waters of the bay. Daily parades and briefings were conducted squarely in front of this shack, where superiors used the veranda as a platform from which to read orders and give pep talks. A moveable blackboard on trestles listed aircraft assignments for the day. Inside, a centrally-located large circular Seiko clock fastened to the rearmost upper wall was set to Tokyo time – the locus for all Japanese planning and records.

Rabaul proved a relatively amenable location for Zero-sen pilots. A fleet of vehicles captured from the Australians locally or seized at Singapore transported pilots to their fighters. Sufficient inventory permitted off-duty officers to borrow a sedan to drive into Rabaul township for errands or to go sight-seeing on its outskirts. Mail from home was reasonably frequent, brought in by a regular Tokyo–Truk–Rabaul air service operated by Combined Fleet Headquarters flying boats. "Consolation performances" – the equivalent of American USO shows – also featured in Rabaul life. Sometimes local soldiers conducted shows themselves, and all such entertainment was well-attended.

Lae enjoyed none of these facilities, with recreation confined in the evenings to writing letters and playing board games or musical instruments. Outdoor

The Tainan Kokutai flightline at Lakunai in mid-1942. The vehicles in the background were captured in Singapore, while in the foreground right is a C5M2 "Babs" reconnaissance aircraft. Powered by the same Sakae-12 engine as fitted to the Zero-sen, the "Babs" was operated in modest numbers (only 30 were acquired by the IJNAF) during the early stages of the Pacific War. (Author's Collection)

films, especially those by Japanese comedian "Roppo," were popular, and coveted Hollywood movies were traded between units. Japanese culture embraced ceremony, and any significant occasion was marked with such. Whether it be opening a new road, a building extension, rejuvenated airfield facilities, or creation of a new government authority, dress white uniforms, sake, and lengthy speeches marked all such events.

Victory monuments and shrines for the war dead adorned Rabaul's streets, parks and central botanical gardens. A shrine for lost fighter pilots adjoined Lakunai's operations shack. The largest cenotaph was the victory monument to celebrate the occupation of Rabaul itself. Built near the main wharf, it was attended by another proximate shrine commemorating all those lost during the invasion.

Hot tubs were set up at Lakunai's eastern end, supplied by a regular stream of hot thermal spring water. Traditional Japanese sports including archery, and regular games of baseball transpired during rare periods of down-time. Unlike its Allied counterparts, Combined Fleet rarely rewarded or even recognized its pilots, or others in its command. Vice-Admiral Jun'ichi Kusaka, commander of the 11th Air Fleet from 8 October 1942, was one of the few senior officers to implement such initiatives, although not until early 1943.

By the end of 1942 the original IJNAF fighter units sent to the South Seas had either been all but wiped out or seriously denuded of veteran pilots. From the Tainan Kokutai, only 11 surviving aviators were returned to Japan in November 1942, where they recuperated and subsequently reformed into the 251st Kokutai. The 2nd and 6th Kokutai remained at Rabaul, where, during the 1 November 1942 Combined Fleet restructure, they were redesignated the 582nd and 204th Kokutai, respectively.

A rarely-acknowledged feature of the South Seas war is the degree to which carrier pilots were seconded to land-based units to gain combat experience. The earliest secondment took place in late November 1942, when a detachment of pilots from *Hiyo* was attached to the recently redesignated 204th Kokutai at Buin.

IJN sailors and officers visit the victory monument at Rabaul. It commemorated the Japanese servicemen lost during the invasion of New Britain in late January 1942. The victory monument was not far from the main wharf, and in the background can be seen part of Chinatown. (Author's Collection)

CHAPTER 4

WEAPON OF WAR

The A6M2 Model 21 Zero-sen equipped virtually all carrier- and land-based fighter units in the South Seas throughout 1942. Almost identical to the Model 11 that gave the fighter its combat debut over China during the second half of 1940, the Model 21 had played a key role during the attack on Pearl Harbor in December 1941. In 1942, it represented cutting-edge technology, and the aircraft proved capable of both carrier- and land-based operations.

The Model 21's Nakajima Sakae-12 radial with a single-stage supercharger, driving a three-bladed constant-speed propeller, proved so reliable that examples of airframes lost to non-combat engine failure were exceedingly rare. The engine's supercharger enabled the Zero-sen to climb to 20,000ft with ease, and up to 30,000ft if required. The fighter's spring-loaded 330-liter ventral drop tank gave the Model 21 an unrivaled combat radius of 500+ miles – at such distances pilot fatigue became a problem.

To understand the origins of the versatile Zero-sen, we return to arguably the most formative episode in its design – a heated debate between Lt Cdrs Minoru Genda and Takeo Shibata that unfolded at a type concept meeting for Mitsubishi's proposed 12-Shi Fighter on 13 April 1938.

It is essential to note here that Genda was the archetypal fighter pilot of his generation. He had gained nationwide fame by leading the IJNAF's interwar aerobatics team, popularly known as "Genda's Circus." During the war in China he had been a staff officer at 2nd Rengo Kokutai Headquarters, planning air operations. From March 1939 he served as naval attaché to the Japanese Embassy in London, returning to Japan in October 1940. Once home, Genda lectured to attentive audiences on the Battle of Britain, as he had witnessed it firsthand during the summer of 1940. His lectures inevitably gave flattering reviews of the Spitfire, which did not sit well with the more senior members of his audience. Japan had recently signed the Tripartite Pact with Germany and Italy, and official complaints concerning Genda's views soon reached the Naval Department, his detractors claiming that they gave the impression Britain could even win the war.

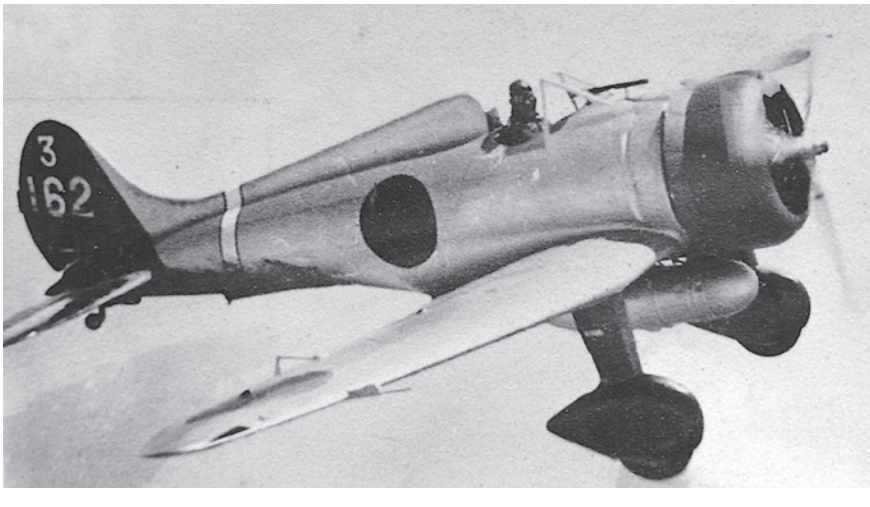
This then was the Genda who addressed the type concept meeting in April 1938. Then serving as the Yokosuka Kokutai hikotaicho, he emphasised maneuvrability as the crucial characteristic for the 12-Shi fighter – a view held by most pilots in the IJNAF at the time. Shibata, then assigned to the "Fighter Specialist Unit" of the Navy Air Arsenal Experimental Division, and previously air group commander for aircraft embarked in the carrier *Kaga*, alternatively and robustly stressed that speed was more important. This was a much-contested but equally-qualified argument.

A distinguished naval aviator and fighter pilot with more than 3,000 flying hours to his name, Lt Cdr Minoru Genda (seen here as a captain during the early stages of World War II) was serving as the Yokosuka Kokutai hikotaicho when he attended the type concept meeting for the 12-Shi fighter. He argued that maneuvrability was key to the new aircraft's success, while others, including Lt Cdr Takeo Shibata of the "Fighter Specialist Unit" of the Navy Air Arsenal Experimental Division, lobbied for increased speed. (Public Domain)

Genda and Shibata had graduated from the Naval Academy in 1924, and both enjoyed similar credentials and prestige within the IJNAF. To bolster his argument, Genda highlighted the unquestionable success of the A5M "Claude" in China, which he credited to maneuvrability. Shibata countered that speed complemented by range would overcome any shortcomings in maneuvrability, underlining that no amount of skill could make a fighter go faster or farther. As a result of this meeting, the IJNAF wavered on its determination to meet its own requirements, leading to a compromise design for the 12-Shi that meant the A6M had a shorter range and reduced armament and wingspan, thus increasing its suitability for the interception role.

We must now consider why the Zero-sen was relatively underpowered in comparison with its Allied contemporaries. At the outbreak of war, Japanese technology was several years behind the West in respect to engine development. Indeed, no aero engine manufacturer in Japan built a 2,000hp powerplant until 1942. This was primarily because of the design parameters the IJNAF forced upon Nakajima and Mitsubishi, rather than a lack of technological choice available to either manufacturer.

Western design philosophy of the time was to choose the most powerful engine available, reflecting the venerable compromise of speed versus load-bearing capacity. The IJNAF chose a different approach, hence its selection of the Sakae-12 radial for the A6M Zero-sen. This choice was not made by



Predecessor to the Zero-sen was the Mitsubishi A5M "Claude," an exceptionally maneuvrable fighter. On 13 April 1938, at the 12-Shi concept meeting, Lt Cdr Minoru Genda – who had considerable combat experience with the A5M – stated that maneuvrability needed to be a quintessential attribute of the new IJNAF fighter. This particular A5M of the 12th Kokutai saw action over China in 1940 with future ace WO Kazuo Tsunoda at the controls – he later served with the 2nd and 582nd Kokutai in the South Seas theater. (Tony Holmes Collection)

Mitsubishi engineers service a magneto housed in the rear engine auxiliaries area of a Model 21 Zero-sen before it is formally assigned to the IJNAF. Mitsubishi issued unique tool sets for the A6M2 and its Sakae-12 radial engine, making them both easier to service in the field. (Author's Collection)

Mitsubishi, but instead mandated by the IJNAF itself. Mitsubishi had initially promoted its Kinsei radial, whose early versions produced 1,100hp and were later increased to 1,520hp. This was not accepted by the IJNAF, which reserved the large-diameter Kinsei for the G3M and D3A series bombers. The concept of mating a large-diameter engine to a slender and lightweight fuselage adversely effected maneuvrability and handling.

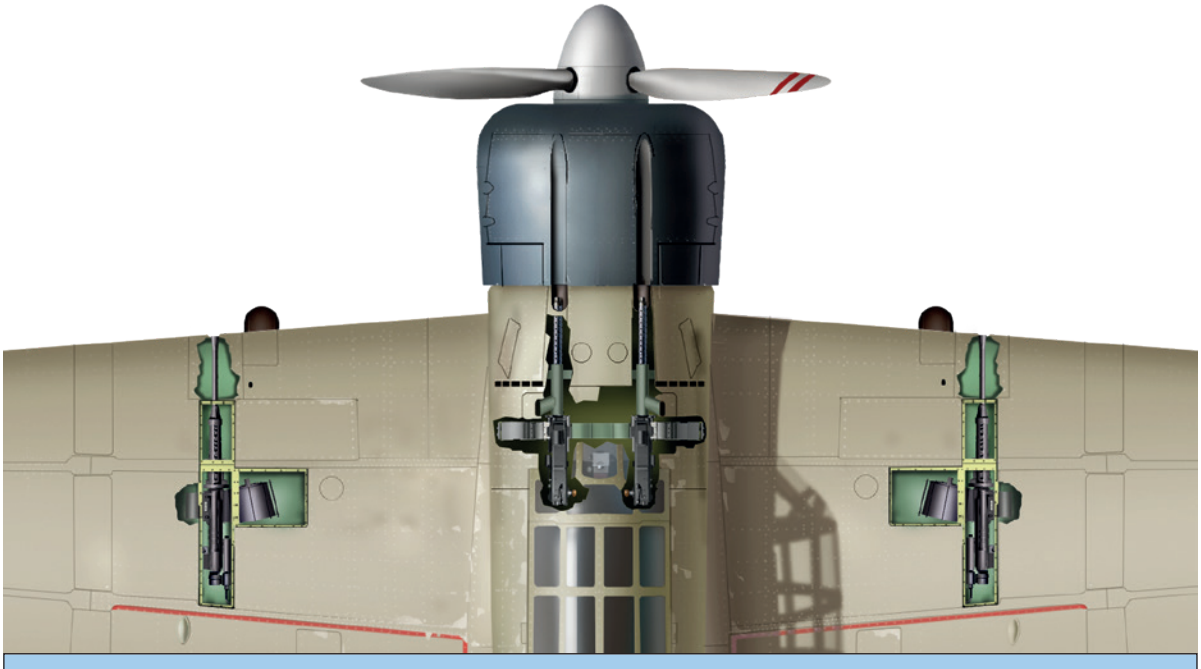
Despite boasting a reliable, if underpowered, engine in the Sakae-12, the Model 21 lacked self-sealing fuel tanks – a common design flaw in all Japanese military aircraft in 1942 – and reliable radios. The latter, installed by Mitsubishi, included both the Type 96 Model 1 voice/telegraph system and the Type 1 Model 3 Radio Compass – the standard radio direction-finding unit fitted to carrier-borne aircraft. The Model 1 consisted of three components, all installed in the cockpit. Transmitter and receiver were in fact separate units that were placed low on the right side of the cockpit, hung in a shock mount via bungee cords – a simple but effective protector. The radio operated in the frequency range 3.8 to 5.8 megahertz, which was at the lower end of the shortwave band.

The radio sets were removed by the Tainan Kokutai pilots shortly after their arrival at Lae due to their wretched reliability. Although the sets were in fact both well-designed and well-built, their effectiveness was severely hindered by poor shielding and grounding of the overall installation, particularly as it pertained to the Sakae-12's dual ignition system. This caused severe interference to both reception and transmission. Static charges generated by movement of the airframe through the atmosphere exacerbated this parlous situation.

South Seas Zero-sen pilots without radios resorted to traditional visual methods of communication with their hands and/or airframe movements, such as waggling wings. The aerial battles around Guadalcanal posed considerable challenges for flight leaders trying to coordinate combat actions due to the impressive cloud formations which built up over the Solomon Sea, thus degrading visibility.

In the South Seas, the Zero-sen added brazen low-level fighter sweeps to its repertoire, but at considerable cost. Damage inflicted by such raids was minimal, with strafing runs often checked by effective AA fire. During the earlier Philippines and Dutch East Indies campaigns, Zero-sen units had obtained effective results from strafing, thus the same pilots undertook such attacks expecting similar results in New Guinea.

Lae-based Zero-sen units in particular also lacked the pervasive early-warning coastwatcher system which so benefited the Allies, leading to insufficient time to



A6M2 ARMAMENT

Two fuselage-mounted Type 97 machine guns (based on the British Vickers machine gun) mounted in the A6M2 fired 7.7mm ordnance. Ammunition boxes either side of the guns contained 700 rounds per weapon. The A6M2's split cowl had recesses that housed the protruding barrels of both guns, and their rate of fire was controlled by interrupter gear. The weapons were manually charged by the pilot, who was also able to clear them if they suffered stoppages whilst being fired. Jams were rare, with the guns proving to be exceptionally reliable in combat.

Each wing housed a 20mm Type 99-1 cannon (based on the Oerlikon FF) just outboard of the propeller arc, fed by a circular ammunition canister mounted on a slightly angular azimuth. Although the cannon muzzles did not protrude outside the wing, during head-on passes the muzzle flash was abundantly visible. The Type 99-1 had a maximum rate of fire of 490 rounds per minute – reasonably slow for an aircraft cannon. Although each canister could contain 60 rounds per gun, the ammunition loaded was usually a few rounds short to minimize the chance of the feed jamming. Improvements to the weapon resulted in the long-barreled Type 99-2 cannon, although these did not appear in the South Seas theater until the first Model 22s arrived at Rabaul in late February 1943.

Most of the Zero-sen's aerial victories in-theatre were achieved with the Type 97 machine gun. Its fast rate of fire – 900 rounds per minute – was effective, especially if the aircraft was close to its target. Although more aggressive Zero-sen pilots often returned from combat with empty machine gun magazines, it was exceptional for them to expend all their 20mm rounds even during multiple strafing runs.

intercept intruders targeting IJNAF airfields and other military targets. Instead, A6M pilots were often sent aloft too late, leaving them to vainly pursue enemy aircraft long after they had delivered their attacks unmolested.

Elements of the Japanese character played out during the design phase of the fighter and when it was used in the South Seas. These were characterized by meticulous attention to detail and an assiduous focus on improving quality, although such efforts were again confined by the rigid parameters set by IJNAF command. Building the highly innovative Zero-sen and training pilots to

Kanoya Kokutai A6M2 Model 21 Zero-sen K-108 taxies at Lakunai in October 1942. The Hokoku-556 subscript on its fuselage denotes that this was the third aircraft donated by Chiba Fisheries, while the diagonal red stripe on the fin (just visible above the wing leading edge) was a leadership marking, likely indicating that its pilot was a shotaicho. (Author's Collection)

consummately maneuvre the type in combat in the early war years was a hard-won skill that had to be finely-honed.

The longer-term Allied rejoinder when confronted by these achievements was to "change the game," with fighter pilots being instructed to avoid fighting their Japanese opponents within their own framework of reference (essentially bouncing enemy aircraft from superior altitude). At the same time, the American aircraft industry was encouraged to make the most of the technical edge enjoyed by engine manufacturers and develop powerful fighters like the F4U Corsair, F6F Hellcat, and improved versions of the P-38 Lightning and P-47 Thunderbolt. All four aircraft had seen combat in the Pacific by the end of 1943, and they would exact a heavy toll on the now-inferior A6M through to war's end.

The Zero-sen continues to be championed for its maneuvrability in combat, although this feature had a pitfall. The diaries of many South Seas pilots record how they detested free-for-all dogfights because of their "confronting" nature, with situational awareness quickly 'going out the window' in such circumstances. The favorite tactic of most Zero-sen pilots was to dive through an unsuspecting formation and despatch a chosen target with focused short-range bursts, before regaining altitude as soon as possible via the fighter's admirable rate-of-climb (the Model 21 could climb to 6,000m in seven minutes and 27 seconds). Unfortunately, this soon became the favorite tactic of their Allied opponents.

In 1942, under the increasing duress portended by Allied bombings, South Seas groundcrews still managed to conduct routine inspections after every mission, alongside 300-hour inspections which took an entire week and the 400-hour engine overhaul of the Sakae-12, which took ten days. In seven months of operations in the New Guinea/Bismarck Sea area, the Tainan Kokutai performed 3,090 sorties in 879 missions, during which time only 20 aircraft aborted and 39 were combat-related losses – on average, one lost every six days. It was by far a better combat ratio than the unit later sustained during the battle for Guadalcanal, where, in barely three months, it had 22 aircraft shot down – on average, one every four days. In that same period, somewhere between 40 and

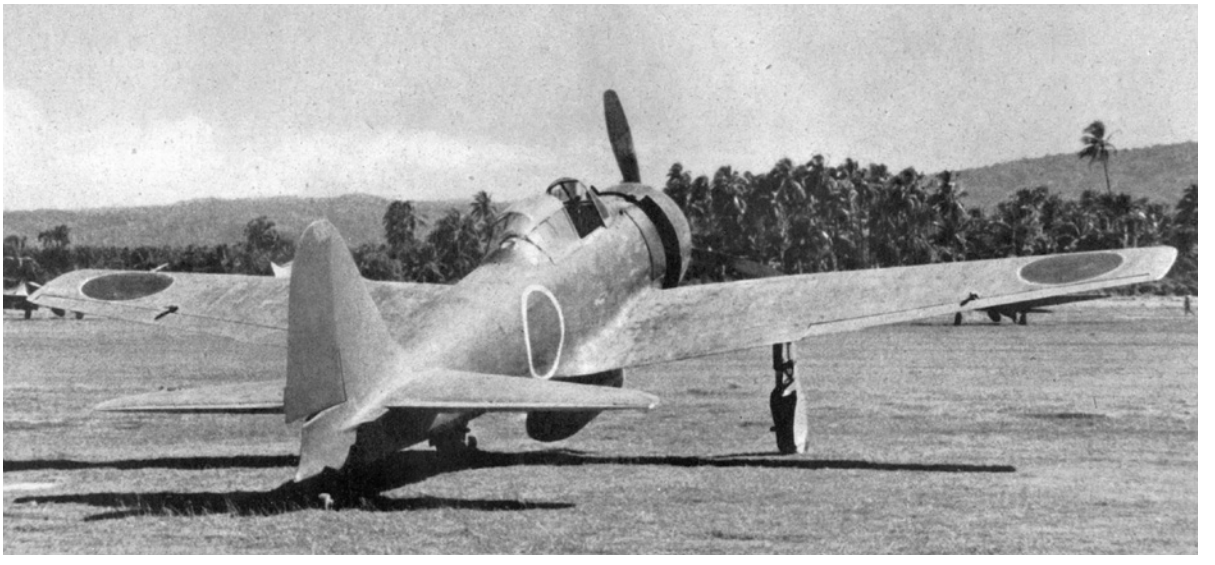
The A6M2 had two Type 99-1 20mm cannon installed in the wings. Based on the Oerlikon FF, this was an exceptionally light weapon, but had a low rate-of-fire and a low muzzle velocity. IJNAF fighter pilots also complained about the limited amount of ammunition carried in the Zero-sen's wing magazines – each weapon fitted in the Model 21 had a drum housing just 60 rounds, which gave less than ten seconds worth of firing time at a rate of around 540 rounds per minute. The A6M3 Model 32 increased the ordnance to 100 rounds per gun. (NHHC)

50 fighters were lost to operational attrition, including accidents, being bombed on the ground, salvage, force-landings, and other write-offs.

Like the fighter's Sakae-12 engine, the Model 21's Vickers-based 7.7mm Type 97 machine gun (two of which were mounted in the upper fuselage directly ahead of the pilot) was well-engineered and proved very reliable, rarely jamming in combat. Zero-sen pilots would range their target with 7.7mm rounds, and then once the distance had been established, raise the nose and fire a short burst from the two wing-mounted Type 99-1 weapons (based on the Oerlikon FF). Although the Model 21 could carry 60 rounds of 20mm ammunition per cannon, in practice Zero-sens in-theater were loaded with four rounds less per weapon in order to avoid jamming – this was exacerbated by g-forces that could compress the ammunition bands.

Two 7.7mm machine guns and two 20mm cannon were also fitted in the A6M3 Model 32, examples of which fought alongside the more common Model 21 over New Guinea and, eventually, the Solomons. This "improved" version of the Zero-sen was created following feedback from pilots who had flown the A6M2 in combat over China. Their most vocal complaint concerned the fighter's poor lateral control at high speeds. As air speed increased above 180mph, aileron response deteriorated rapidly, and above 230mph the Zero-sen became difficult to roll. Additionally, pilots wanted better performance at altitude and more ammunition for the Type 99-1 cannon.

The response from Mitsubishi, in mid-1941, was to fit two standard A6M2s with improved Sakae-21 engines. This powerplant featured a



The Sakae-21-powered A6M3 Model 32, which reached the South Seas theater in the summer of 1942, was Mitsubishi's attempt to address the need for better performance at altitude and control at high speed. Note its clipped wingtips – the variant's most visible distinguishing feature. However, the Model 32's poor range meant that it was primarily used for short-range offensive missions and the defense of Rabaul by both the Tainan Kokutai and the 2nd Kokutai. This example, from the 204th Kokutai was photographed at Buin in 1943. (Tony Holmes Collection)

two-stage, two-speed supercharger and a higher rating of 1,130hp. However, the new engine was heavier and larger than the Sakae-12 mainly due to the supercharger, which moved the center of gravity too far forward on the existing Model 21 airframe. To restore the airframe's tolerance, the Model 32's engine mounts were moved rearwards and the cowl was enlarged, with modifications to the cowl flaps, oil cooler intake, and carburettor air intake. The cowl also had openings in the front for two 7.7mm machine guns.

After initial flight testing, pilots recommended eliminating the Model 21's wing-folding mechanism and fairing over the wingtips. In shortening the wing by around three feet, Mitsubishi engineers also reduced the span of the ailerons. This combination improved aileron control, roll rate, and the fighter's performance in a dive at higher speeds for a relatively small loss in overall maneuvrability and rate-of-climb.

The ammunition feed system for the Type 99-1 cannon was changed from a drum magazine to a belt feed, and the number of rounds increased to 100 per weapon thanks to greater storage volume within the new wings.

With both a revised fuselage and a new engine, the A6M3 was designated the Type 0 Carrier Fighter Model 32. Disappointingly, the Model 32 proved to be only five knots faster than the Model 21, due in part to the added weight of the new engine and more ammunition. More critically, although the capacity of the two wing fuel tanks was increased slightly, a reduction in the size of the fuselage fuel tank lowered the overall fuel capacity. The latter, when combined with the Sakae-21's higher fuel consumption than the Sakae-12, reduced the range of the Zero-sen Model 32 by a staggering 580 nautical miles.

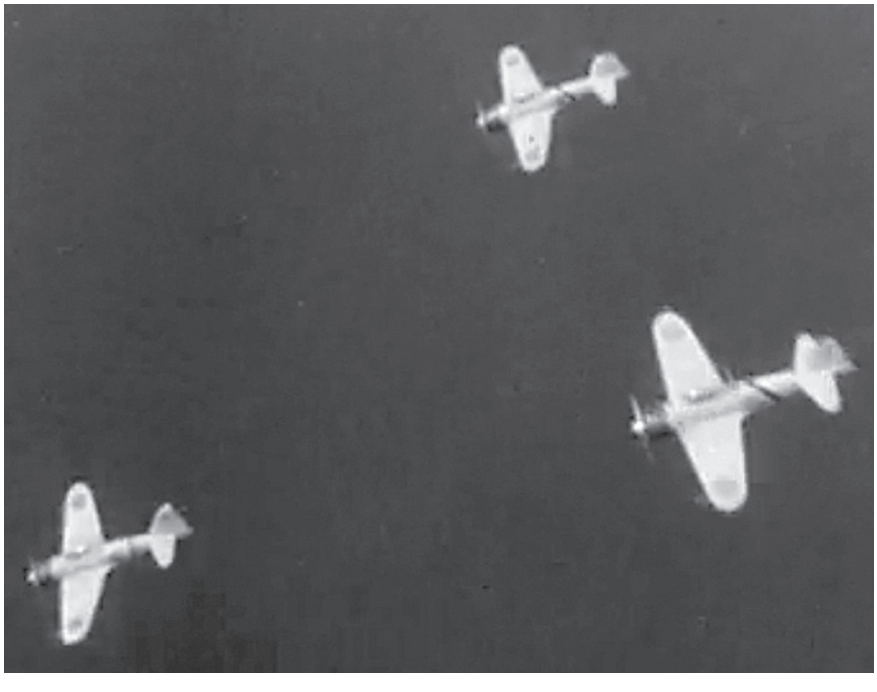
Entering production in early 1942, the Model 32, with its inherent deficiencies, came to be used primarily for short-range offensive missions and the defense of Rabaul by both the Tainan Kokutai and the 2nd Kokutai through the use of airfields such as Buna, Buka, and Buin.

CHAPTER 5

ART OF WAR

When Jiro Horikoshi designed the first-generation of the Zero-sen, an air war against the USA was remote from his thinking and a war in the vast Pacific extending to the South Seas even more so. Instead, he anticipated that his new fighter would meet the demands of the expanding air war over China, where A5Ms of the 12th and 13th Kokutai were successfully implementing fighting techniques later adopted by the first cadre of Zero-sen pilots.

Unexpectedly, the war of attrition which unfolded over New Guinea and then the Solomon Islands' vast oceanic expanses challenged several extant combat parameters learned in China in ways which were both nuanced and



A poor but rare photograph of a shotai of early Zero-sens in flight. The slanting fuselage bands suggest these fighters are from the Tainan Kokutai, although the leading aircraft has a vertical band that makes positive unit identification uncertain (Author's Collection)

From 8 October 1942, the Eleventh Air Fleet was commanded by Vice-Admiral Jin'ichi Kusaka, who trusted his unit and operational commanders to lead the pilots as they saw fit in the South Seas theater. (Public Domain)

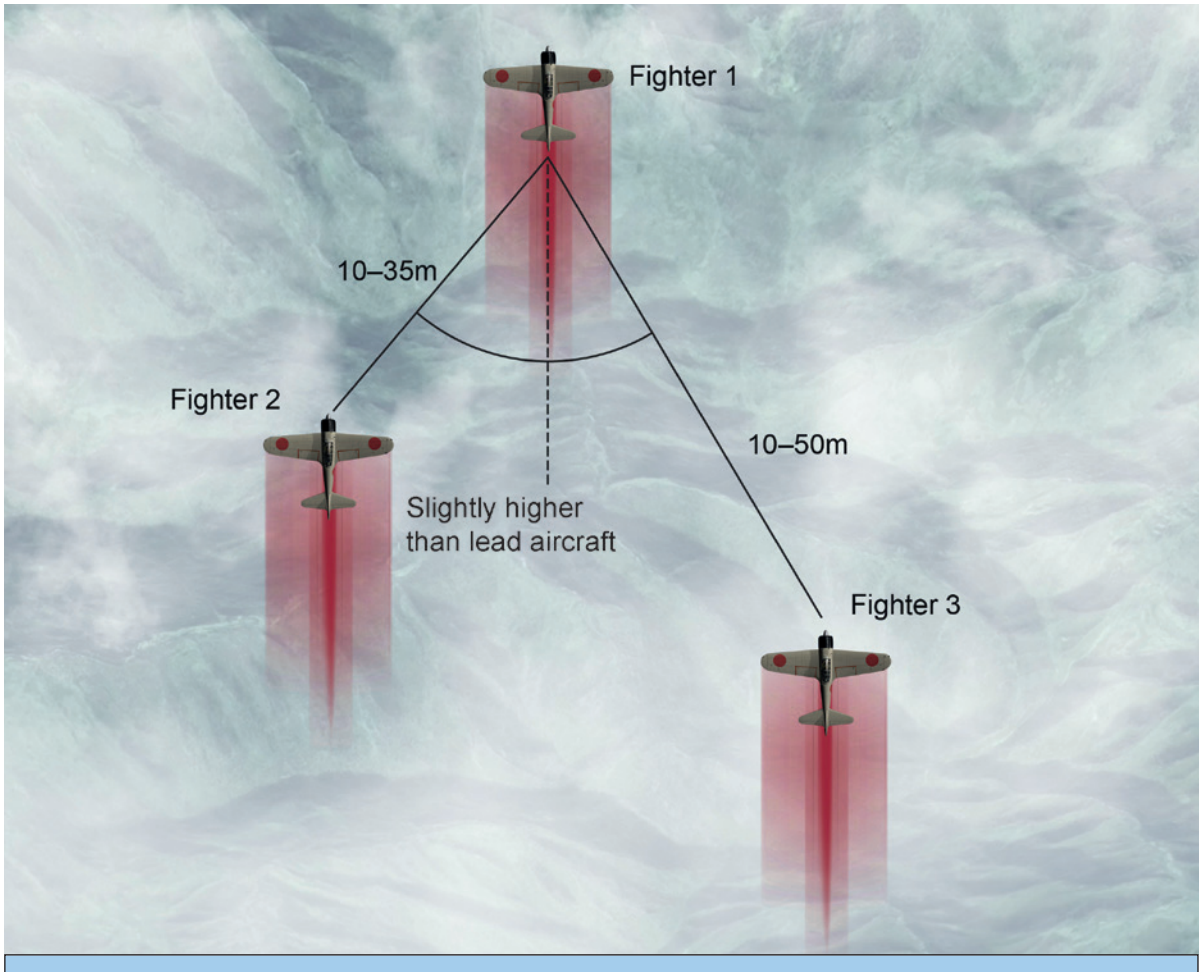
direct. Throughout 1942, it soon became apparent that no one side would or could hold distinct success. Of course, there were oscillations of fortune, glaring and otherwise, on both sides, but in the South Seas clear victory was never within grasp of either belligerent. All of these factors, and more, shaped the way Zero-sen pilots fought in theater.

The standard chutai of nine aircraft divided into trios of three shotai looked good during training and as a theory in the classroom. However, and inevitably, during the first year of the Pacific War fighter combat disintegrated into uncoordinated dogfights in which each individual was forced to rely on his own abilities. Another nuanced factor had an effect here too – traditional Japanese sports such as kenjutsu, judo, and sumo wrestling focus on achievement of the individual. To what degree this played out during combat is an opaque variable. However, the Western concept of teamwork in sports certainly bolstered the Allied concept of formation fighting.

More than any other theater, the geography of New Guinea and the Solomons dictated the art of war for every Zero-sen pilot. Whilst the South Seas' ubiquitous deep green jungle appears picturesque from the air, it cloaked a treacherous biosphere of punitive climate, disease, impeding flora, venomous creatures, and alien tribes who may or may not have been friendly. New Guinea's highlands are complemented by the formidable Finisterre and Saruwaged Ranges. Similarly, Guadalcanal featured an interior spine of mountains that were not to be trifled with. Such intimidating geography generates unpredictable and anabatic airflows, resulting in cloud and micro-meteorology. These could, and did, pose serious danger to pilots, a number of whom were lost to such factors.

The war of attrition that quickly materialized in-theater strongly affected the fighting style adopted by IJNAF pilots. Whilst the raw number of Zero-sen combat losses was markedly fewer than claimed by the Allies, the pilots killed were all vastly experienced aviators who could not be easily replaced. At the beginning of the war the IJNAF mustered about 3,500 pilots of all types, of which roughly 600 served on carriers. Critically, at the time of the attack on Pearl Harbor, each pilot had an average experience of about 800 hours flying time. The persistent loss of key pilots throughout 1942, first linear and then almost exponential from around June of that year onward, corroded this experience base. By the end of 1942, Japanese factories could replace Zero-sens to some extent, but as a nation, Japan lacked the human resources to make good the loss of skilled and experienced Zero-sen pilots over New Guinea and the Solomons.

In terms of leadership, the command structure for South Seas fighter units was clear-cut, both in respect to individual kokutai and within the broader context of 11th Air Fleet operations. The latter was initially commanded by Vice-Admiral Nishizo Tsukahara, who was sent home early on in his Rabaul posting on medical grounds. His replacement was Vice-Admiral Jin'ichi Kusaka,

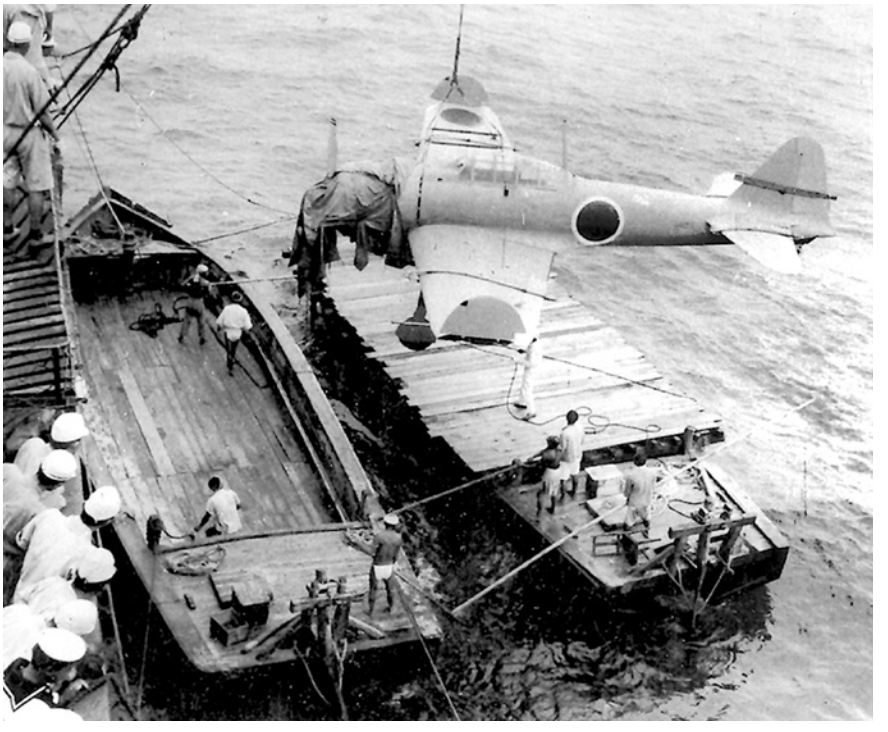


ZERO-SEN SHOTAI

Whilst this diagram represents the standard doctrinal Zero-sen shotai of three fighters, combat formations in the South Seas theater in 1942 often broke convention. Distances between aircraft, and angles entailed therein, varied considerably, depending on the demands of combat and the whim of flight leaders. The numbering of each aircraft is indicative of where the pilots were listed in operations sheets. In addition, two- and four-aircraft shotai often appeared in late 1942, when missions protecting Guadalcanal destroyer convoy runs contained odd numbers of fighters

who, as previously noted, took command on 8 October 1942. Both men shared a solid grasp of the practicalities and limitations of IJNAF air power, and were happy for unit and operational commanders to lead the pilots as they saw fit. This laissez-faire command style was important, as IJNAF fighter operations in other theaters were impeded by constant interference from higher command. This was certainly not the case in the South Seas.

Despite the rigorous teaching of formation, gunnery, and combat techniques in Japan, and lessons learned in China, it soon became apparent that the new theater demanded a revision of the tactics that were to be employed. Aside



Its wingtips carefully folded up, a brand new Nakajima-built A6M2 Model 21 is slowly lowered on to a lighter from the auxiliary transport *Mogumigawa Maru* off Truk. The white border to the fuselage roundel was applied in accordance with Naval General Staff Order No. 162 issued by Admiral Osami Nagano on 21 August 1942. Nakajima complied with this requirement almost at once, whereas Mitsubishi had ceased production of the A6M2 in June. South Seas kokutai requesting an attrition replacement such as this aircraft via a bi-monthly inventory report usually had to wait approximately two months for the fighter to arrive. (Author's Collection)

from dogfights against Allied fighters and bombers, Zero-sen pilots also strafed shipping and land targets, escorted bombers and convoys, conducted standing patrols in defence of IJN ports and facilities and, from late 1942, dropped 60kg bombs on Allied bomber formations.

In late 1942, carrier pilots were seconded to land-based units in Bougainville to gain combat experience as they prepared to make good the losses suffered in the Solomons. This practice continued in the theater throughout 1943.

Other miscellaneous missions included cross-service cooperation, such as when Tainan Kokutai Zero-sens coordinated with Imperial Japanese Army (IJA) troops near Lae in July 1942 to try to hunt down Kanga Force soldiers after a daring raid against Salamaua. Three months later they assisted with the attempted rescue of stranded IJA soldiers on Goodenough Island. Such resource-intensive efforts to save lives dilutes the myth that the Japanese never tried to rescue lost souls. Single-minded focus was on full display on 17 May 1942 when upset Tainan Kokutai pilots all but demanded the right to drop a survival package over the crash site of their downed comrade Lt(jg) Yamaguchi Kaoru – an officer no less.

Training was also carried out to a limited degree, although this was mostly constrained by the demands of combat and the limited inventory of Zero-sens. The bottom line was that there were never enough fighters for the theater. The need for operational units to make good rising attrition was incessant, and South Seas Zero-sen units often waited in vain for replacement aircraft.

Fighter kokutai, like all other IJNAF units, submitted bi-monthly wireless inventory reports addressed to the IJNAF General Staff and the Navy Aeronautical Department of the Navy Ministry via 11th Air Fleet Headquarters. Following analysis of these reports, unit requirements were worked out in

Pilots from the 6th Kokutai detachment bound for Rabaul come together at Kisarazu immediately prior to their departure on 21 August 1942. Standing in the back row at the extreme left is Lt Mitsugu Kofukuda, hikotaicho of the detachment. (Tony Holmes Collection)

Tokyo and monthly allocations made. Air depots were then ordered to make the necessary arrangements with the 11th Air Fleet to ship Zero-sens to Rabaul. If none were available at the depots, fighters were delivered directly from Nakajima or Mitsubishi factories – this could take up to 30 days. Thus, needy South Seas fighter units would usually receive replacements approximately two months after tabling their monthly report.

However, following the defeat at Midway in June 1942, the bulk of Zero-sen production was earmarked to replenish Japan's carrier air groups. As an emergency measure, the 24th Air Flotilla in the Marshalls was ordered to temporarily detach 25 Zero-sens with their pilots to the Tainan Kokutai in two batches, which were delivered in late May and early September 1942, to make up production shortfalls. Faced with a shortage of aircraft, fledgling pilots were often grounded for extended periods, while experienced aviators continued to see combat in the few A6Ms that were available.

Both novices and veterans alike preferred to use the Zero-sen's 7.7mm machine guns when engaging the enemy due to their reliability. Although gunnery technique was a personal preference, nearly all pilots ranged their target with machine guns before firing the 20mm cannon. The distance at which they fired at their target was acquired from experience and preference. A rule of thumb was the closer the target, the more the 20mm cannon was fired. The 204th Kokutai developed its own gunnery test ranges and engineering section at Vunakanau in late 1942, and several groundcrew were injured there when test-firing a 30mm cannon.

The staple fighter opposition for Zero-sen pilots in-theater during 1942 were the P-40E Warhawk (USAAF)/Kittyhawk IA (RAAF), the F4F-3/4 Wildcat (US Navy and US Marine Corps), and the P-39/P-400 Airacobra (USAAF). Although examples of the P-38F/G Lightning arrived in Port Moresby in late 1942, its combat involvement did not gear up until the following year. The IJNAF and its pilot cadre considered the Zero-sen more than a match for these fighter types throughout 1942.

One of the leading advocates of the A6M was Lt Mitsugu Kofukuda, hikotaicho of the newly arrived 6th Kokutai flying from the just-completed Buin airfield. It was tasked with providing cover for IJN destroyers making vitally important Guadalcanal convoy runs, the defense of Buin and, later, Ballale and the occasional fighter sweep. Kofukuda had arrived in-theater with an advanced detachment from the unit on 21 August 1942 (as previously noted), and the 204th (as the 6th was resdesignated on 1 November) was flying a mixed inventory of Models 21s and 32s by year-end.

Leading by consensus, Kofukuda encouraged discussion among his Zero-sen pilots at Buin on how best to fight their Allied enemies. Proud of his pilots, and the techniques they developed, his brimming enthusiasm earned him the nickname of "Ibari no Kofukuda," translating best as "Kofukuda the Boaster," within the IJNAF. He also supervised secondments of carrier pilots – initially from *Hiyo* – assigned to his unit to gain combat experience in late 1942.

One of the robust discussions chaired by Kofukuda at Buin aired ideas on how best to bring down a Flying Fortress. His pilots unanimously concluded that a head-on attack from slightly below would be most effective, concentrating fire into what they considered to be the Boeing bomber's Achilles' heel – the area where the fuselage joined the wing. Kofukuda authorized practice runs to be made between patrolling Zero-sens in order to perfect pilots' attacking technique.

Such training paid dividends on 1 December 1942 when the 204th Kokutai downed a lone B-17E of the 11th Bombardment Group (BG) that was conducting a solo photographic mission to Bougainville. The crew of the Flying Fortress had anticipated interception by defending fighters, and three Zero-sens duly appeared overhead Buin. An initial skirmish unfolded at 1000 hrs, and the B-17 gunners excitedly claimed two fighters destroyed whilst the aircraft headed for the northern end of Choisel Island. Once there, the bomber was intercepted by what the crew estimated was another flight of six Zero-sens. These circled and maneuvred around out of range until one suddenly "lunged" directly at the nose of the B-17. With a combined collision speed in excess of 400 knots, the Zero-sen tore cleanly through the bomber's fuselage just behind the wings, neatly cleaving it in two. The tail section, carrying what would prove to be the sole survivor (tail gunner) of the attack, rolled to one side and descended in relative stability.

Future high-scoring ace WO Sho-ichi Sugita of the 204th Kokutai was just 18 when he claimed his first victory over Buin on 1 December 1942. Sugita accidentally collided with a B-17E from the 11th BG, cutting the bomber in two. (Tony Holmes Collection)

The Flying Fortress had been struck by future high-scoring ace WO Sho-ichi Sugita, who had taken off that morning with two other warrant officer shotaicho on what was supposed to be a routine training mission. The first of six Zero-sens to depart Buin was to act as a Flying Fortress, against which the three shotaicho would practice their head-on attack skills. All three pilots had been distracted by the appearance of an actual B-17, and Sugita initially kept his distance from the bomber before carefully lining himself up to attack the aircraft from head on.

He had planned to hit the underside of the B-17 with 20mm cannon shells in an attack that he estimated would last half-a-second. Sugita subsequently related that when he fired, the sudden size of the rapidly approaching Flying Fortress felt like a "roof collapsing upon him," and he instinctively ducked down in his seat. When Sugita taxied in at Buin, it was obvious that his Zero-sen had lost nearly half of its fin and rudder in the collision. Later that evening, a forgiving Kofukuda sent Sugita a congratulatory bottle of sake.

The next morning, Kofukuda assembled his pilots and told them to approach as close as possible to a B-17 before opening fire with 20mm cannon when almost upon the bomber, then to instantly break away. He stressed that the normal method of placing an aircraft in the gunsight would not work against a Flying Fortress, so he urged his pilots to follow Sugita's aggressive example of attack, whilst emphasizing that mid-air collisions were not encouraged.

After many months of combat firstly with the 6th Kokutai and then the 204th, Kofukuda eventually transferred to the Atsugi Kokutai training unit in Japan in March 1943. Shortly after returning home, he compiled a glowing report of the Zero-sen's combat performance during his time in the South Seas. Kofukuda's account was widely read, including by senior INJAF officers. Warmly welcomed by IJN Naval Headquarters staff, the report helped consolidate the view that the Zero-sen needed little change for it to remain competitive against Allied fighters. The improved A6M3 Model 22 of early 1943, which featured more fuel and Type 99 Mk 2 20mm long-barreled cannon, was created largely in response to technical reports emanating from Rabaul which sought to improve the combat experience of kokutai in the South Seas.

Like fighter pilots of any nationality during World War II, aviators flying the A6M in the South Seas were quick to pick off stragglers from bomber formations. As such, it is useful to understand the generic USAAF view of (mostly) Zero-sen tactics employed against bombers as detailed in an intelligence report compiled on this subject in late 1942:

> The opening attacks have been very aggressive in an attempt to disable the formation leader or flight leaders. The bombers most distant from the center of the formation often received the brunt of these attacks. Subsequently, the battle developed into a series of individual attacks from all directions. A great percentage of the attacks developed from high frontal positions between ten and two o'clock, followed by a breakaway down to the left or right or even a split "S". However, it is not safe to assume that Jap[anese] fighters have a favorite approach in attacking. Approaches have varied constantly almost in cycles from front to rear to beam attacks. The importance of the target of the Allied bombers, the skill and degree of training Jap[anese] pilots available in-theater have had, the defensive firepower and pattern of Allied bomber formations and the altitude at which interception has taken place have all influenced the angle and direction of the approaches made by the Jap[anese] fighters.
>
> Jap[anese] Navy pilots have shown a tendency to be more aggressive and persistent than Japanese Army pilots. Newly arrived Japanese fighter pilots were eager and aggressive, but as they gained more experience, their attacks against the heavy firepower of bomber formations became increasingly cautious. Gunners report that in many cases Japanese fighters have turned away when confronted with a long burst

NCO pilots from the Tainan Kokutai's 2nd Chutai come together for a photograph at Rabaul in June 1942. In the front row, from left to right, are (with IJNAF credited victories in brackets) FPO3cs Yoshimi Onishi, Seiji Ishikawa (5 victories) and Kenichi Kumagaya (2 victories), Sea1c Suehiro Yamamoto and FPO3c Hiroshi Okano. In the second row, from left to right, are FPO2c Toshio Ota (34 victories), FPO1c Saburo Sakai (60+ victories), Sea1c Masayoshi Yonekawa (6 victories) and FPO3c Unichi Miya. Standing, from left to right, are FPO1c Hiroyoshi Nishizawa (87 victories), FPO3cs Daizo Fukumori, Yutaka Kimura and Masuaki Endo (14 victories), PO1c Katsumi Kobayashi and PO3c Takeichi Kokubun. The real scores of IJNAF pilots are, as a generalization, a quarter of these official figures. Of this group, only Sakai and Ishikawa survived the war. (Tony Holmes Collection)

> fired at maximum range. Aggressiveness and persistency has been sadly lacking in most cases where Japanese fighters attacked escorted Allied bomber formations. The hit-and-run method has been most commonly used. In some cases Jap[anese] fighters have dived vertically through the entire Allied formation.

Inevitably, we must address the contentious matter of Zero-sen claims versus actual scores in this theater. Definitive results can be established by comparing Allied and Japanese mission records. In 1942 both sides over-claimed by about three-and-half-to-one in terms of fighters destroyed in aerial combat. This conclusion excludes bomber crews, whose gunners' claims verge on the hysterical. For example, 22nd BG B-26 gunners claimed more than 200 Zero-sens destroyed in New Guinea in 1942. In reality, they failed to down a single example. Curiously, Allied bomber crews claimed many more victories than their IJNAF counterparts similarly manning guns in "Betty" and "Nell" bombers.

Relevant Zero-sen records against Allied fighters and bombers apportion credit on a differing basis that varied from mission to mission. All participants could be equally credited, or claims could be divided by shotai or, more often, individually. Day-by-day comparisons of the following top-scoring Tainan Kokutai pilots in New Guinea from April to the end of July 1942 are instructive. These victory scores counter the exaggerated and mythological numbers which continue to be repeated without basis in fact, as opposed to the checkable totals for the leading pilots as follows – Lt(jg) Jun'ichi Sasai 5.5, FPO1c Toshio Ota 5.3, FPO1c Saburo Sakai 4.3, FPO1c Hiroyoshi Nishizawa 3.9, and WO Satoshi Yoshino 3.4.

CHAPTER 6
COMBAT

The common perception of the land-based Zero-sen in 1942 is of dogfights over mountains and vast seas, yet the reality is rather different. There seemed almost no role that the versatile Zero-sen could not undertake, as we shall see – nightfighter, strafer, escort fighter, pursuit fighter, defensive fighter, and even fighter-bomber. Furthermore, the first year of combat in 1942 produced many matchless examples of eccentric circumstance, hitherto unpublished due to the scarcity of relevant Japanese-language records and the averseness of Western authors to locate and invoke them. What follows in this chapter is but a modest sample of the eccentricities of the Zero-sen's first year of combat. All of this unfolded in a remote theater, made fearsome as much by its belligerents as the intimidating geography and weather which so heavily influenced the outcome of all engagements.

The first opponents to confront the Zero-sen of Lt Harutoshi Okamoto's newly arrived Chitose Kokutai were Port Moresby-based Catalinas of the RAAF, the flying boats instigating long-range night harassment bombing missions against both Rabaul and it airfields shortly after the town's occupation by Japan's imperial forces. These night raids annoyed Okamoto's pilots to the extent they briefly used both the A5M4 "Claude" and Model 21 Zero-sen as nightfighters. The inaugural, and only, night operation followed a second busy day of patrols on 3 February 1942, when Okamoto's pilots scoured Rabaul airspace from 0700 hrs to 1730 hrs. With no enemy aircraft encountered, the stage was set to inaugurate the nightfighter plan, of which FPO3c Kiyoji Ishikawa later wrote:

> When we first arrived at Rabaul, searchlights were still being set up, and single enemy flying boats were harassing the town every second night. Although these raids did not cause serious damage, it was clear they were primarily aimed at shipping and port facilities. We named the days they didn't come as "off-duty days," and the intruders never failed to appear on the "on days." We decided to deal with the flying boats by experimenting with ways to intercept them. In front

Stalwart of the 4th Kokutai fighter wing and Tainan Kokutai was FPO1c Hiroyoshi Nishizawa, who went on to become a legend in the IJNAF. Over New Guinea in 1942 he scored 3.9 victories, with more claimed over Guadalcanal. Nicknamed 'the Devil' by his fellow pilots, Nishizawa became the IJNAF's greatest ace. He had been credited with 87 victories prior to his death aboard a transport aircraft that was shot down by US Navy Hellcat fighters on 26 October 1944 whilst flying over Mindoro Island, in the Philippines. (Tony Holmes Collection)

of a blackboard, a senior officer of division rank coordinated our strategy. Okamoto offered to patrol first over the surrounding river area, while FPO1c Hiroyoshi Nishizawa would cover an area to the west marked with a circle. The rest of the pilots discussed where the most suitable patrol areas might be, and the combat strategies we might best employ. It was in an oblivious state that we commenced night flights at the lower airfield.

One night [3–4 February] someone shouted that an enemy was approaching, so we strained our ears. Sure enough, there were explosions in the distance. I shouted into Okamoto's quarters but there was no reply, just a swaying awning in front of his empty office. The commander shouted to me from the grassy bush behind his quarters that he was undertaking ablutions, and told me to grab Nishizawa instead!

I shouted out for Nishizawa, jumped into the cockpit of my fighter and took off. The night was sufficiently dark that it was impossible to easily sight the enemy aircraft. The task would have been made easier had we been trained in nightfighting. Then I got in a burst and held my breath as a stream of bright lights flew like fireworks. Both enemies and friends know that they are shooting at each other due to these bright tracers. However, the glow now made the target harder to see. Despite my efforts I soon gave up and returned to the field. At debriefing I told my superiors that I could not judge the range as I could barely see the target. The bright tracer blinded the accuracy of my aim. I concluded in front of them that this style of nightfighting was a gimmick and would not work. I only participated in one trial night fight.

Thus, the only time a Zero-sen was used as a nightfighter over Rabaul in 1942 met with limited success. Scrambled during the transition midnight phase of 3–4 February 1942, Ishikawa had attempted to intercept five Port Moresby-based Catalinas (A24-3, -5, -14, -17, and -18) from the RAAF's Nos. 11 and 20 Sqns. The first intruder was over Rabaul at 2235 hrs. A mixture of fighters, including Ishikawa flying a "Claude," scrambled five minutes later in response to audible warnings of approaching aircraft. Two Zero-sens launched alongside the "Claudes," the Model 21s being flown by FPO1c Hiroyoshi Nishizawa and Lt Shiro Kawai. Shortly thereafter, Catalina A24-3, flown by Plt Off Brian Higgins, broadcast a warning of nightfighters, as recorded in the No. 11 Sqn records:

> Owing to the aircraft being attacked by enemy fighters and being dazzled by the glare of searchlights, accurate observation of the attack could not be obtained. A24-3 received several bullet holes in the hull and the W/T [wireless/telegraphy] operator was wounded in both ankles. The aircraft escaped further attack by diving into cloud at 4,000ft. A24-5 was attacked by enemy fighters whilst on the run-up to the target. To escape, all bombs were jettisoned and the aircraft attempted to gain cover of cloud. Both port and starboard fuel tanks were holed, and a burst was received in the oil tank, which also severed an oil line. The aircraft escaped and proceeded to Salamaua, where a forced landing was made at 0300 hrs. Repairs were attempted, and the aircraft proceeded to Moresby on one engine.

All of Okamoto's fighters had returned safely to Lakunai by 0010 hrs on 4 February. The Chitose Kokutai operations log notes that this night scramble encountered five enemy aircraft, and shot one down. The unit also claimed to have hit the left wing tank of a second aircraft, but it failed to crash. Okamoto's pilots thought they were dueling with Short Sunderland flying boats. The difficulties encountered during this one-off night operation forced Okamoto to abandon any future such missions.

On 14 March, land-based Zero-sens of the 4th Kokutai fighter wing flew over Australian mainland territory for the first time (carrier-based Model 21s had escorted bombers in their raid on Darwin on 19 February). The origins of this obscure mission can be traced back to the evening of 2 March, when five RAAF Hudsons took off from Port Moresby to bomb Gasmata at 2200 hrs. Capricious weather over New Britain meant one aborted early, two returned after bombing the target and the remaining two aircraft failed to return. One of the latter, Hudson A16-165 flown by Flt Lt Kenneth Erwin, had crashed on Urai Island near Gasmata after being hit by AA fire.

At daybreak, a Japanese officer alongside villagers scoured the crash site, where they found Erwin nursing a broken leg. He was transferred to an anchored Japanese warship offshore, where he was interrogated and then executed. Meanwhile, navigation maps from the wreck, including one marking out an airfield on Horn Island, off the coast of northern Queensland, were flown to Rabaul. This rudimentary RAAF airstrip, in truth used as little more than a staging base, had been unknown to the Japanese until the capture of the map. A 4th Kokutai "Betty" immediately reconnoitred the island, subsequent to which it was decided there and then that the airfield was a worthy target.

On 14 March 12 Zero-sens from both the Kawai and Iwasaki chutai led by Lt(jg) Nobuhiro Iwasaki, alongside eight "Bettys," assembled for the task. The day started early for the bomber crews, roused from their Rabaul tents well before dawn. Led by Lt Shigeo Yamagata, they departed Vunakanau at 0810 hrs, performing a starboard holding turn overhead Lae two hours later. Here, they joined up with Kawai's Zero-sens, neatly divided into two chutai of six – Lt Shiro Kawai led FPO2c Takuro Yoshi'e, FPO3c Keiji Kikuchi, FPO1c Satoshi Yoshino, FPO2c Tsutomu Ito, and FPO3c Take'ichi Kokubun. The second chutai, led by Lt(jg) Nobuhiro Iwasaki, included FPO2c Hiroyoshi Nishizawa, FPO2c Ichirobei Yamazaki, FPO1c Toru Oshima, FPO2c Hajime Miyahako, and FPO1c Genkichi Oishi. These names, with two exceptions as we shall see, represent a stalwart cadre who appear continuously throughout the remainder of the New Guinea air war.

Warning of the impending raid came from the small RAN signals detachment on Thursday Island, northwest of nearby Horn Island, relaying a transmission from Kerema, on the Papuan coast. Spotters at Kerema forewarned that eight unidentified bombers, escorted by fighters, had passed overhead at 1106 hrs, heading their way. At 1225 hrs the first bombs exploded on the airfield, cleaving Hudson A16-136 neatly in two with a direct hit. Little other damage was inflicted, however.

A detachment of USAAF 7th Pursuit Squadron (PS) P-40E Warhawks had arrived on Horn Island the previous week to defend the airfield from just such an attack. Leading a unit that had yet to see combat, Maj Robert

A G4M1 "Betty" on final approach into Lakunai with a Model 21 Zero-sen in the foreground – both types equipped the 4th Kokutai in the early months of 1942. The volcano to the background left is Mount Tavurvur. (Author's Collection)

OPPOSITE
Two four-aircraft flights of P-40Es from the 7th PS fly over typical northern Australian terrain in April 1942. This unit was the first American Warhawk squadron to see action in the defence of Australia during a brief deployment to Horn Island in March 1942, when it engaged fighters and bombers from the 4th Kokutai. By the following month it had re-joined the remainder of the 49th Pursuit Group at airfields just south of Darwin. (Author's Collection)

Morrissey had limited operations to patrols in pairs, ordering his pilots not to venture out of his sight. At 1130 hrs on 14 March Morrissey was debriefing his pilots following the second patrol of the day when the alert sounded. He shouted for his men to stick together, after which nine P-40Es took off at 15-second intervals and formed up 15 minutes later. Following Morrissey were Lts Arthur House, Claude Burnette, Clarence Sanford, Bill Reddington, C. T. Johnson, Wilson Chapman, Hal Martin, and Stephen Andrews.

A littoral of heavy cloud and haze, causing poor visibility, would heavily influence subsequent events. On climbing through 10,000ft, Morrissey instructed his pilots to test fire their guns, only to find that his were inoperable. Turning leadership of the formation over to Reddington, he dived away and returned to Horn Island, where RAAF groundcrew quickly cleared the six 0.50-cal. weapons. Morrissey then rejoined the orbiting Warhawks south of the island at 1220 hrs, and minutes later an excited radio broadcast informed everyone that bombs were hitting the airfield. If this was not bad enough, Morrissey realized that while he had been away Reddington had also dropped out with malfunctioning guns, Martin was nowhere to be seen (he had set off on his own to hunt the Japanese) and Sanford was lagging well behind the formation. Morrissey ordered the remaining six Warhawks to close up, before heading north towards the bogeys.

Yamagata's bombers were still descending from 23,000ft down to 20,000ft in order to gain speed for their run on the target when a wayward Lt Martin, flying his first combat mission, opened fire from too great a distance. The "Betty" crews logged Martin's ten-minute "escapade" at 1225 hrs, during which time they closed ranks. Due to his inexperience, Martin had opened fire at maximum range at the far left shotai and quickly expended all of his ammunition. Nonetheless, he got sufficiently close to the formation to observe that the bombers were "brown and green," reflecting the early "China Scheme" camouflage worn by several G4M1s of the 4th Kokutai. Before diving away and heading back to base, Martin scored five hits on the "Betty" at the extreme left of the formation, and also holed the adjacent bomber, inflicting minimal damage on both aircraft.

When Morrissey's seven-strong formation of fighters was spotted, the Kawai Chutai turned to engage them, leaving the wary Iwasaki Chutai overhead to protect the bombers. Confused and widespread dogfighting unfolded over the Torres Strait from 19,000ft down to the cloud base below. The Iwasaki Chutai

joined in to assist the fight some 15 minutes after Kawai's pilots had initiated combat. Fighting then continued for a further 35 minutes, during which time 25-year-old Lt Arthur House managed to get on to the tail of FPO1c Genkichi Oishi, whose smoking Zero-sen he thought he had damaged. Hot pursuit and high-G turns then jammed House's guns:

1230 hrs, 14 MARCH 1942

HORN ISLAND, NORTHERN AUSTRALIA

1 Six P-40E Warhawks of the 7th PS form up overhead their austere airfield at Horn Island prior to intercepting eight G4M1 "Betty" bombers escorted by 12 A6M2s. All of the IJNAF aircraft are from the 4th Kokutai. At 1225 hrs the first bombs explode on Horn Island, having been dropped from 23,000ft.

2 The 'Bettys' are fleeing for home in a fast descent from 23,000ft down to 20,000ft by the time the first Warhawk flown by Lt Hal Martin (who had set off on his own to find the enemy) opens fire at distance. The bombers immediately close up their formation.

3 The Kawai Chutai engages the Warhawks at 1230 hrs, leaving the Iwasaki Chutai above the bombers so as to protect them from being attacked. A widespread dogfight ensues over Torres Strait.

4 At 1245 hrs the Iwasaki Chutai dives down to join the engagement with the Warhawks. The dogfight rages for a further 35 minutes.

5 Lt Arthur House shoots down FPO1c Genkichi Oishi in A6M2 F-114 close offshore Horn Island at 1300 hrs. Three minutes later, Maj Robert Morrissey shoots down Lt(jg) Nobuhiro Iwasaki in F-134.

6 At 1340 hrs Lt Shiro Kawai leads his shotai down to observe the heavy cruiser HMAS *Canberra* off Arden Island but none of the fighters have any ammunition left for a strafing pass. Three "Bettys" do, however, rake the warship with gunfire before returning to Vunakanau. The remaining Zero-sens head back to Lae.

FOLLOWING PAGES

2
1
4
U.S. ARMY
F-151
3

5
U.S. ARMY
F-134
6

> I continued my course directly at the enemy aircraft, expecting to hit his fuselage with the heavy part of my wing. He started firing, but must have observed my approach and changed course. I continued to dive, and the leading edge of my right wing went through his fuselage approximately in the middle of the canopy. I went to ram the plane, the wing went through the canopy and blew it up. There were pieces on fire and falling everywhere. My plane started falling and flipping over. The oxygen mask had me blinded for a while.

Oishi's Zero-sen, F-114, crashed into the ocean just off Horn Island, its wreckage lying undiscovered in shallow water until 1997. With his left wing badly damaged, House chose to land "hot" back at Horn Island without flaps to maximize airspeed, thus increasing his chances of retaining control when rolling out on the runway.

Meanwhile, Morrissey has also downed a Zero-sen when he fired at a fighter from astern at 200 yards. He had attacked Lt(jg) Nobuhiro Iwasaki, whose chutaicho fighter, F-134, with two red fuselage bands crashed just off nearby Hammond Island at high speed. Although Iwasaki bailed out before impact, his body was later recovered not far from the wreckage.

All the Warhawks, minus Lt Sanford, had returned to Horn Island by 1330 hrs, where Morrissey immediately held court with his excited pilots. At the conclusion of the wrap-up, Morrissey telegraphed RAAF HQ in Melbourne that his pilots had made five confirmed kills, despite only two Zero-sens having been downed. Back at Lae, Kawai's pilots were more profligate in their claims, submitting that they had encountered 12 "Curtiss" fighters, of which they had destroyed six, with two more as probables.

Capt (seen here as a colonel) Bob Morrissey led the Horn Island detachment in his capacity as CO of the 7th PS. He was credited with downing the Zero-sen flown by Lt(jg) Nobuhiro Iwasaki during the 14 March 1942 attack on Horn Island. Subsequently made CO of the 49th Fighter Group in January 1943, Morrissey was severely wounded (he lost a leg) during the invasion of the Philippines in October 1944 when the ship on which he was a passenger was bombed. (NARA)

On the way back to Lae, Kawai had led his shotai down to observe the heavy cruiser HMAS *Canberra* in the vicinity of Arden Island, although they could not strafe it as they were all out of ammunition. Three "Bettys" fired at the warship, however, wounding four ratings who were later disembarked at Horn Island for medical treatment.

The return flight was particularly tiring for the G4M crews, as they had to refuel at Lae before proceeding to Vunakanau at 1645 hrs. Late afternoon drizzle forced Yamagata's bombers to descend low along New Britain's southeast twisting littoral, the exhausted "Betty" pilots finally landing at Vunakanau at dusk. That evening, their armorers logged ordnance expenditure of 78 60kg bombs and 4,312 rounds of 7.7mm ammunition. The Warhawks were misidentified by the bomber crews as British "Hurricanes."

Kawai's Zero-sens had fired a total of 7,850 rounds of combined 7.7mm and 20mm ammunition at Morrissey's Warhawks, and apart from the loss of Oishi and Iwasaki, incurred no other damage. Iwasaki's place as chutaicho was duly shared by the chutai's two most senior pilots, FPO1c Hiroyoshi Nishizawa and FPO1c Toru Oshima.

On Horn Island, Lt Sanford's disappearance tempered the Warhawk pilots' fervor. He had last been seen with a

Zero-sen on his tail, so his outlook was bleak. This despondency became more accentuated when searches over the next few days turned up nothing, and he was reluctantly declared missing in action (MIA). Sanford's comrades recalled that he had entered the scrap at a disadvantage – an earlier patrol that same day had left his Warhawk with intermittent engine RPM issues, a left main gear with a faulty seal, a right cylinder bank which threw oil, and a faulty machine gun. In fact, Morrissey had grounded Sanford's Warhawk shortly before the alert was received, but he had relented following Sanford's robust protestations. Despite his Warhawk's poor mechanical state, Sanford had in fact survived his clash with the enemy.

After a scrap with a Zero-sen, he had manually pumped up his undercarriage, which had half-lowered due to combat g-forces. Sanford entered cloud while doing so, where he became disorientated and the fighter tumbled. Regaining control, he climbed to get his bearings, but saw nothing but ocean. Thinking his compass was faulty, Sanford tried, unsuccessfully, to find land until his fuel was exhausted. He then ditched and eventually made it to Bremer Island, about 375 miles west of Horn Island, in his dinghy, where two aborigines tended him. They then took him by boat to the Australian mainland, where, ten days later, Sanford was flown to Darwin by RAAF Hudson. He was returned to the US shortly thereafter, but not before he had submitted the following report of his encounter:

> Three Zeros were dispersing and climbing when I came in to range. I opened fire at about 150 yards on one and continued until I was about 25ft from his cockpit. He was climbing to the left, and I saw my tracer go in front of the prop. I sat back behind the cockpit and moved up again. Some splinters came from it and I turned to the right and fired at another plane from about 100 yards. The tracer took him along the left side, forward of the cockpit. I turned left and dove. At this time the air around my plane was full of tracers, and the plane lurched some to port. I left my assailants in the cloud, and when I came out below them I pulled up.

By early April the fighter wing of the 4th Kokutai had been absorbed into the Tainan Kokutai, which had been transferred to Rabaul from the NEI. On 5 April, just days after the unit's arrival in-theater, Zero-sen pilot FPO2c Yoshi'e Takuro became the Tainan Kokutai's first battle casualty, although it was still functioning with the same operational structure as its predecessor unit.

At 0710 hrs a complete chutai of nine 4th Kokutai "Bettys" led by Lt Kuniji Omura assembled over Vunakanau and headed for Lae, intent on bombing Port Moresby. Shortly before 1000 hrs they rendezvoused with four Zero-sens overhead Lae, giving coastwatcher Flt Lt Leigh Vial, codenamed "Golden Voice," time to radio Port Moresby of the approaching formation. Forewarned, No. 75 Sqn scrambled Kittyhawk IAs in pairs from Port Moresby's Seven-Mile Drome at 1040 hrs. Flt Lt Les Jackson, in A29-9 "N," led six fighters aloft, with Flg Off Barry Cox in A29-24 "D," Flg Off Jeffery Woods in A29-12 "T," Plt Off Oswald Channon in A29-7 "A," Plt Off Ally Davies in A29-18 "U," Sgt John Pettett in A29-28 "I," and Sgt William Cowe in A29-11 "Z."

At around 1100 hrs, when overhead the former mining town of Bulolo, two "Bettys" turned back with engine problems. The remaining aircraft approached Port Moresby from the north at 15,000ft, at which height the bombers dropped their payload. No aircraft were damaged at Seven-Mile Drome itself, although

Sqn Ldr John Jackson and his younger brother Flt Lt Les Jackson on leave in Australia in early 1942. On 5 April Les shot down FPO2c Yoshi'e Takuro, who became the first battle casualty for the Tainan Kokutai in the South Seas. He later took over command of the RAAF's No. 75 Sqn at Port Moresby after John was shot down and killed by Tainan Kokutai pilot FPO2c Hideo Izumi near Port Moresby on 28 April 1942. (Author's Collection)

petrol drums were set ablaze in a cache stored in a valley northeast of the base.

At 1145 hrs the Kittyhawk pilots sighted the departing bomber formation at 21,000ft, with Woods subsequently reporting "Zeros probably behind and above bombers." Jackson noted "escort above light layer at approximately 25,000–26,000ft," and Pettett added "escort at 3,000ft below main force." Conversely, Cox stated "escort approximately 3,000ft above in front and right of bombers."

These brief statements reflect the fact that Kawai's Zero-sens had by now split into two shotai, with the first below and ahead of the bombers at about 18,000ft and the second above and behind at about 24,000ft. Jackson first attacked the bombers from below, then sighted a diving Zero-sen attacking a Kittyhawk, to which Jackson gave chase, giving it a long burst. Jackson thought it immediately burst into flames, stating that he saw several pieces fly off. Woods also saw an enemy fighter going down in flames on the southwest side of the field. These observations cite the downing of Takuro, his demise marking Jackson's first de facto aerial victory – he had previously been credited with downing a Zero-sen on 24 March. Despite numerous previous claims, Takuro's A6M was also the first example shot down by No. 75 Sqn.

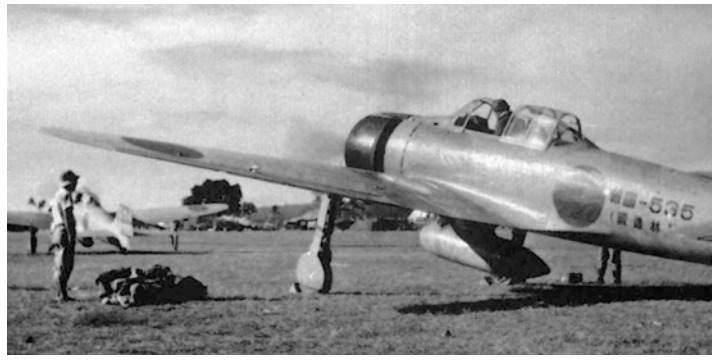
Notwithstanding other claims of probables, the combat ended with no further Japanese losses, and by 1230 hrs the Kittyhawks were taxiing back at Seven-Mile Drome, where the Australian pilots excitedly relived their battle. The three remaining Zero-sen pilots returned to Lae, landing there at about 1300 hrs. They submitted claims for two confirmed victories, although no Kittyhawks had been lost.

Takuro's Zero-sen had gone down northeast of the airfield trailing smoke. Australian spotters reported that it crashed at 1210 hrs, and they had seen the pilot bail out. It did not take long to locate the wreckage, the Zero-sen being found in a ravine on the southern slopes of the Astrolabe Range, 22 miles northeast of Port Moresby. First to arrive at the scene was a patrol from "C" Company, 39th Militia Battalion, led by Capt Robinson. Not far from the wreck was a parachute strung up in a treetop. The next day villagers sighted Takuro near the mine at Sapphire Creek, although he ran away when challenged. Locals provided a handy description of the pilot, who was wearing a white singlet with a navy blue neckband and khaki shorts.

However, Takuro was never seen again, and following this sighting he disappears from history. He wandered the hilly savannah area at the base of the Wariarata escarpment's southwest cliffs. These cannot be climbed, for vertical walls hundreds of feet high bar access to the plateau above. From several sightings, we know Takuro walked about 12 miles in his first day prior to being seen for the last time by the villagers. He was doubtless trying to find a mountain pass which would take him to Lae. Capture was not an option, and he would have soon realized that the harsh geography prevented his return. Perhaps he shot himself to avoid capture, or eventually died of exposure. Either way, his loss

encapsulates the lack of survival options for Zero-sen pilots in this harsh land. The stark and wretched predicament of a lost, yet healthy, fighter pilot defies the popular image of the exploits of the Tainan Kokutai in New Guinea.

On the morning of 26 April, exactly three weeks after Takuro had been shot down, the first Tainan Kokutai combat air patrol (CAP) to take off from Lae that day intercepted three B-25s from the 3rd BG over the airfield. The bombers had originated from the Queensland town of Coen, and FPO2c Hideo Izumi and Flyer 1c Take'ichiro Hisdaka identified their opponents as Hudsons, claiming one shot down. The Mitchell crews reported being attacked by five Zero-sens, claiming one shot down, although none were lost in this brief scuffle. After all three B-25s returned safely to Coen, Izumi and Hisdaka flew back to Lae at 0800 hrs. A further six CAPs flown from Lae that day were uneventful. The same could not be said for two sweeps of Port Moresby by the Tainan Kokutai that also originated from the airfield on the 26th.



A6M2 HK-535 (tailcode V-158) of the Tainan Kokutai was photographed at Lakunai in April 1942. Lt Shiro Kawai is in the cockpit running up the engine while WO Tora'ichi Takatsuka attends the wing, ready to remove the wheel chocks when the pilot gives him the signal. This aircraft is marked with two barely visible yellow command bands just to the right of the national insignia, while the more obvious Hokoku-535 subscript on the fuselage explains that the aircraft was donated by the Hayashi Forging Co. Ltd. of Hebei City, in Ishikawa Prefecture. (Author's Collection)

The first gaggle of seven Zero-sens was led by Lt(jg) Kaoru Yamaguchi, and the fighters arrived over the target area at around 0800 hrs. The pilots then descended, and at 0805 hrs they strafed Kittyhawks on the ground at Seven-Mile Drome. Five minutes later, they were engaged by five No. 75 Sqn fighters ten miles southeast of the airfield. Following the clash, single Kittyhawks were credited to the shotai led by Lt(jg) Yamaguchi and FPO1c Toshio Ota.

Plt Off Geoffrey Atherton, in A29-79, was bounced by a pair of Zero-sens from above. He wisely dived to sea level to escape, making it home unscathed. However, it is the remarkable adventure of Sgt Michael Butler, flying A29-48, to which we now turn. He was initially chased to ground level by a Zero-sen, while another planted itself about 600 yards off his tail. This pair chased him through the coastal hills of Port Moresby's northeast savannah hinterlands.

Flying away from his airfield, Butler gently banked to starboard to make a wide sweeping turn in an attempt to get home. This maneuvre took him out to sea, where he passed low over a Papuan outrigger lakatoi (canoe) and, glancing backwards, he thought he saw his pursuers strafe it. By this time another three Zero-sens had joined the unsolicited game of hide-and-seek. Now in the penurious position of being pursued by five belligerents fixated on his demise, Butler subsequently calculated that the 40-minute chase endured for some 120 miles. His account of the action read as follows:

> I could just hold the Zeros at 290mph at approximately 60 [inches] of boost at water level. At 70 [inches] I could leave them, and they pulled away 12 miles southeast of Seven-Mile. I'd bend the throttle a bit more – they didn't think it was possible you could have so much boost out of an engine. Something in the vicinity of about 70 inches of mercury and everything should blow up and you should have detonation, but I found that I could get to about 300 knots before I'd get detonation and temperatures got too high. This allowed me to get away from

them a little, and then I'd have to pull the throttle back 20 or 30 inches and they'd catch me up again.

This went on till I got back to Moresby, at which point I thought, "Now, bust you, I've lost them." I thought they'd turned inland, where they would wait for me to try and land at Seven-Mile. So I thought, "Well, I'll trick you. I'll land at the civil drome." I couldn't see them, and I just did a "split-R" circuit straight in and landed at Three-Mile instead. I was absolutely stonkered. I got out of the aeroplane and I couldn't talk. A Yank came up to me and I think I smoked about half-a-packet of cigarettes before I was sensible. I had never been so scared in my life – I was really in a mess. After about three-quarters-of-an hour I got myself together and flew back to Seven-Mile Drome.

Escorted by Australian soldiers, Tainan Kokutai Zero-sen pilot FPO3c Yoshimitsu Maeda boards SS *Taroona* on 6 May 1942 at Port Moresby, bound for Australia and captivity. This was the photograph passed by US Army censors for publication on 21 June 1942 that later encouraged Maeda to attempt suicide due to the loss of face he experienced upon seeing it published on the front page of the *Melbourne Sun* newspaper. Maeda survived imprisonment in Australia and returned to Japan from Sydney in March 1946. In post-war Japan he deliberately "disappeared" in an effort to hide his past. (Author's Collection)

Incredibly, the five Zero-sens that pursued Butler did not score a single hit on the fleeing Kittyhawk, his fighter having been fired upon by both Yamaguchi and Ota. After returning to Lae, the Tainan Kokutai pilots examined the limited damage that had been inflicted to their airframes – Yamaguchi's fighter had received five hits, while the mounts of FPO3c Takeo Kume, Flyer 1c Tamio Kobayashi, and FPO2c Yoshisuke Arita had all sustained single bullet holes. Despite having suffered little more physical harm from the encounter than sunburn, Butler slept fitfully for several nights following his brush with death.

Two days later, on 28 April, an exceptional Zero-sen pursuit unfolded over New Guinea with unintended consequences for Tainan Kokutai pilot FPO3c Yoshimitsu Maeda. That morning, three B-25Cs from the 3rd BG departed Charters Towers, in Queensland, to reconnoitre the north coast of New Guinea. Such a mission tested the limit of the operational range of the Mitchell, and one aborted with a mechanical fault and the second aircraft completed an uneventful mission. The third bomber was Lt Ralph Schmidt's *Der Schpy*, tasked with covering the sector that included Lae. When Schmidt arrived overhead the town, Maeda, in V-110, and FPO2c Yoshisuke Arita were scrambled and duly chased the Mitchell halfway across New Guinea. Arita scored several hits that resulted in the bomber blowing a tyre upon landing at Port Moresby.

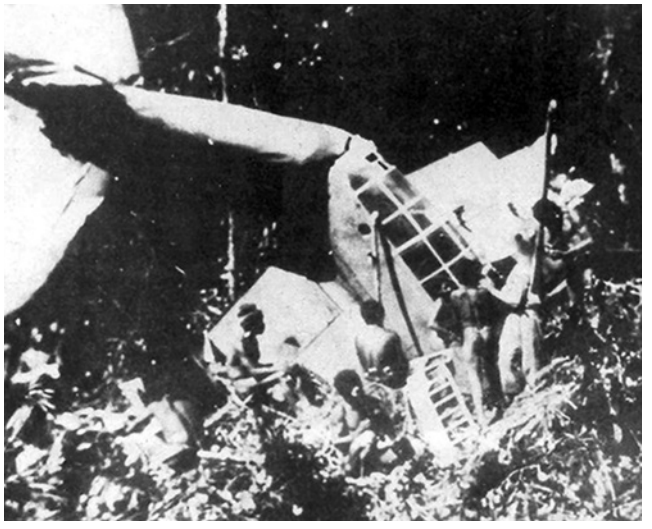
Inconceivably, Maeda had continued following *Der Schpy* through cloud during the last part of the chase after Arita had turned back for home – an unheard of tactic at the time. When Maeda broke off his pursuit, he discovered to his alarm that he had become disorientated and climbed to get his bearings, only to then suffer hypoxia from a faulty oxygen valve. Running low on fuel and still with no idea where he was, Maeda force-landed in a coastal area 100 miles southeast of Port Moresby. Dazed and with a cut scalp, he was quickly captured by an Australian Army officer. Although Maeda indicated that he wanted to be killed rather than become a PoW, he was transported via a coastal lugger to Port Moresby and later incarcerated in Australia.

On the morning of 17 May, 17 Tainan Kokutai Zero-sens again attacked Port Moresby, and on this occasion they were being led by hikotaicho Lt Cdr Tadashi Nakajima. Breaking with convention, several strafed 12-Mile Drome, after which they reformed overhead the town at 1040 hrs for the return journey to Lae. It was soon clear to the others that two fighters were missing. During the strafing runs AA fire had hit the engines of the Zero-sens flown by FPO2c Tsutomu Ito and Lt(jg) Kaoru Yamaguchi. Ito had decided to try for Lae alone, breaking away early and later force-landing in Allied-held territory. He was captured almost two weeks later.

Paraded through Sydney in 1943 with the incorrect claim that it had been "shot down by U.S. Air Force," this is FPO3c Yoshimitsu Maeda's Tainan Kokutai A6M2 V-110, which he force-landed on 28 April 1942 due to hypoxia. It was quickly recovered to Port Moresby, thence Australia, for intelligence assessment. (Author's Collection)

Yamaguchi, meanwhile, was found by the other Zero-sen pilots when they overtook him as they headed home to Lae, cruising at lower altitude with a faltering engine. The Japanese-language memoirs of FPO1c Saburo Sakai summarize what unfolded in front of him:

> I was looking at the "endless ocean" of trees when my eyes caught a plane, to my right and below, at an altitude of about 500m, flying slowly in the same direction as ours. It was certainly a Zero-sen, and flying alone. This signified that either the plane was damaged or the pilot injured. Although not losing fuel, it was flying exceedingly slowly – almost as if drunkenly. I let my wingmen fly overhead, then approached. I tried hard to slow down, but still flew ahead of him. With no other alternative, I lowered the flaps, thus slowing my Zero-sen until we flew extremely close to each other, our wingtips nearly touching.
>
> Then, the canopy opened, showing a young pilot's face. I saw Yamaguchi, a newcomer who had only recently joined us. We were flying so close that if we spoke, we could have understood each other. But how frustrating, we could not do that. I gestured, putting my hand over one ear while tilting my head, to ask "What happened?" Immediately grasping my gesture, Yamaguchi pointed to his engine and gestured "It's damaged, I'm finished."
>
> On the brink of stalling, I could do nothing to assist Yamaguchi apart from flying side-by-side with him. Meanwhile, other pilots commenced approaches from various directions, circling around Yamaguchi and opening their canopies, encouraging him not to give up, accompanied by gestures, and some were also shouting. Somehow he must fly over the Stanley Mountains, but how? He managed to fly on for another three or four minutes, but finally mountains loomed ahead. Yamaguchi, desperately wanting to climb but being unable to do so, was at a complete loss. And we could not continue alongside him either. Yamaguchi, with a determined look, stared at us



The wreckage of FPO2c Tsutomu Ito's Nakajima-built A6M2 of the Tainan Kokutai was photographed by a USAAF intelligence team a few days after its pilot flew the battle-damaged fighter into trees surrounding Kosipe Swamp on the approach to Mount Albert Edward, in the Owen Stanley Ranges, on 17 May 1942. Ito was captured almost two weeks later, and he was eventually shipped to the Cowra PoW Camp in New South Wales. (Author's Collection)

and gestured "I am done for." Yamaguchi had not a single wound on his body. Only his engine had been hit. He was about to throw away his young, precious life. Of course I thought of a parachute, but he did not have one. None of us were taking parachutes on missions at this phase of the war.

Yamaguchi's Zero-sen now started to turn as the revolution of its propeller visibly decreased. He looked back and raised his left arm, bidding farewell. It is impossible for me to describe my feelings then as mere sadness. I was overwhelmed with regret, and even indignation, although it was unclear even to me what my indignation was aimed at – perhaps a sense of futility at being unable to save a life that should be saved. In full view of his comrades, all watching breathless, Yamaguchi descended uncertainly until his fighter entered and was soundlessly swallowed by the deep jungle. Strangely, there was no fire seen from the point of impact. The sky over the Stanley Mountains remained clear, as if nothing had happened.

Soon, we returned to Lae. On the way to the command post for our mission debrief someone said, "Wait a minute, surely we all know where Yamaguchi fell." Quickly, we pinpointed the location on a chart over which we all pored, and there was general agreement as to the position. Chutaicho Jun'ichi Sasai, who had flown the mission, voiced his opinion that it was possible Yamaguchi may have survived. He proposed to return to the site and drop supplies in case he had.

Nakajima authorized the request and I departed with Sasai shortly thereafter. Packages to be dropped included candies and biscuits, accompanied by bandages and other medical supplies, a water bottle, and cigarettes. Relying on our fresh memories, we circled overhead what was assessed to be the correct location. Yearning that Yamaguchi was still alive, we threw the packages into a sea of trees. They twisted as they fell, becoming smaller and smaller, until finally absorbed by the jungle. Looking back repeatedly, we finally returned to base. We tried to forget the tragedy.

Yamaguchi's remains were eventually recovered from near the mountain village of Boride in 2003.

Three months after the loss of Yamaguchi, seven Zero-sens – two 2nd Kokutai Model 32s and five brand new Model 21s of the Tainan Kokutai – departed the recently completed grass runway at Buna at 0630 hrs on 27 August. The formation was led by Lt(jg) Joji Yamashita, flying V-117 marked with two red command stripes. The principal task of this understrength Zero-sen chutai was to escort eight 2nd Kokutai D3A1 "Val" dive-bombers, each armed with just two 60kg bombs, that were targeting Bofors guns and 0.50-cal. machine guns protecting Gurney Field in Milne Bay. These weapons were manned by "A" Troop of the 2/3rd Australian Light Anti-Aircraft Regiment and the US Army's 104th Coastal Artillery Battalion.

Meanwhile, Capt Fred Eaton, flying a B-17E from the 435th Bombardment Squadron (BS), was on a reconnaissance mission from Port Moresby when at about 0800 hrs Yamashita's Zero-sens spotted the lone Flying Fortress. The aircraft's Australian co-pilot Sgt Merv Bell later reported:

> One Zero peeled off from the formation and attacked us. We pulled up into the cloud. He was only able to make one pass at us. One bullet cut our oxygen supply line to the flightdeck. Others entered the radio compartment, but there was no further damage.

A crewman aboard the B-17E took a photograph of the attacking Model 21, revealing its twin fuselage bands. This was Yamashita's V-117, the only chutaicho-marked Zero-sen in the formation.

After this brief diversion, cloud cover precluded the Zero-sens from rendezvousing with the "Vals" they were meant to be protecting. Yamashita's fighters arrived overhead Milne Bay at 0820 hrs, where they briefly sighted the dive-bombers attacking Gurney Field. The fighter pilots waited for the D3A crews to finish their job before they turned their attention to a four-engined bomber off to the side of the runway that presented them with a juicy target. This was an abandoned LB-30 Liberator that had been badly damaged in a belly landing at the airfield nine days earlier after its starboard main gear refused to extend. A 40mm Bofors AA gun carried on board the transport aircraft as incoming cargo ensured the LB-30 was a structural write-off.

Lt Jun'ichi Sasai, buntaicho of the Tainan Kokutai and celebrated in Saburo Sakai's biography *Samurai*, was a graduate of Eta Jima Naval Academy. He joined the Tainan Kokutai in November 1941, and in six months of combat he was credited with 27 claims – Sasai, however, stated that he had downed twice that number in a letter he wrote home in early August 1942. Like several Tainan Kokutai aces, he met his death in aerial combat over Guadalcanal on 26 August 1942, having fallen victim to F4Fs of VMF-223. (Tony Holmes Collection)

Yamashita now led the seven Zero-sens in a rapid descent and then swept across the airfield at low-level, strafing the LB-30 and setting it on fire. The fighters pressed home repeated attacks between a narrow corridor of coconut trees. As they raced back and forth, dozens of Australian soldiers fired their weapons at the intruders. A number of them subsequently commented that it had been like a shooting gallery.

Into this lively scene approached 12 B-26s of the 22nd BG and six Kittyhawks from No. 75 Sqn returning from patrol, the fighters being led by the CO of the RAAF unit, Sqn Ldr Les Jackson, in A29-71. At 0840 hrs, while Yamashita's pilots continued to attack the LB-30, Lt(jg) Hidetane Futagami and FPO1c Ko'ichi from the 2nd Kokutai broke off their strafing runs to engage the first echelon of incoming Marauders. Jackson's Kittyhawks, flying in two staggered vics at 500ft and 1,000ft, saw the retreating dive-bombers in the distance and quickly overhauled them.

Meanwhile, Yamashita's five Zero-sens continued to imprudently press their luck with strafing attacks until FPO2c Enji Kakimoto sustained hits to his engine. Only then did both he and his leader break off to intercept the Marauders. During a second pass against the B-26s, Yamashita was shot down, his V-117 crashing in jungle several miles north of the airfield. When the wreckage was examined post-war, it was found that the fighter's "hokoku" sub-text indicated it had been paid for by Japanese citizen

Tainan Kokutai pilots gather in front of the command post at Lae airfield for a group photograph in July 1942. They are, standing, from left to right, FPO3cs Tadashi Nakamoto and Sadao Uehara, FPO2cs Ichirobei Yamazaki (14 victories), Shigetoshi Kudo (C5M pilot) and Eisaku Shimizu (C5M pilot), FPO3c Yutaka Kimura, FPO2c Ichiki Toshiyuki, and FPO3c Kiyoshi Nakano. Sitting or squatting, from left to right, are unidentified, F1c Ken'ichiro Yamamoto, Lt Cdr Tadashi Nakajima, WO Tora-ichi Takatsuka (16 victories), and FPO1c Hiroyoshi Nishizawa (87 victories). All of the pilots, bar unit hikotaicho Lt Cdr Nakajima, are wearing standard issue kapok lifejackets. (Tony Holmes Collection)

Yoshihide Shibuya, who also donated sufficient funds to pay for HK-1182 and at least one other aircraft.

Having lost his chutaicho, Kakimoto attempted to join the remaining Zero-sens as they fled the area, only for his damaged Sakae-12 to seize when the engine lost all of its oil. He ditched his crippled fighter, V-130, in shallow waters and swam to the nearby beach, where he was captured. Kakimoto was later escorted to Gili Gili wharf by Australian soldier James Henderson.

FPO1c Sadao Yamashita and Flyer 1c Kihachi Ninomiya had quickly seen that Kakimoto's downed Zero-sen was resting in clear water close to shore, and it was thus salvageable by the Allies. In an attempt to prevent this from happening, they decided to destroy V-130 by strafing. The pilots flew a series of low-level passes, witnessed by Kakimoto, who was already ashore. Focused on the downed Zero-sen, both were bounced by Sqn Ldr Les Jackson and his wingman Sgt Roy Riddel after they had attacked the "Vals." With altitude, speed, and surprise on their side, they made short work of Yamashita and Ninomiya in attacks from the rear. The Zero-sens crashed into the sea, killing both pilots.

Ashore, but soaked, the downed Kakimoto removed a cherished 10 x 8 in. photograph from his flying overall, the image of he and his fellow pilots having been taken at Lakunai just days before. Keen to dry the photograph out, Kakimoto was confident of soon being rescued by Japanese forces, which he knew were in the area. Whilst waiting for his would-be saviors, an ebullient Kakimoto scribed in pencil an account of his adventure on the back of the photograph, thus enhancing its sentimental value as a keepsake:

> Milne Bay 0720 hrs [Tokyo time] – arrived and commenced action. On account of poor weather, the dive-bombers attacked in scattered formation, and when their

last three planes departed, our fighter unit commenced strafing ground targets. Lt Yamashita's aircraft was hit and fuel spurted out. Following him, I was also hit three times. Yamashita signaled he was done for, and made a final salute as he fired from above and behind into a B-26 and shot it down. After his second attack he dived and crashed. I withdrew and was about to re-join the others when my oil pressure failed. Looked for a target to crash into, but finding none, I force-landed in the area. Yamashita and Ninomiya were continuing aggressive action at higher altitude, but at the time when I made my forced landing and waded ashore they were attacked and hit.

0820 hrs, 27 AUGUST 1942

MILNE BAY, NEW GUINEA

1 Two 2nd Kokutai A6M3s and five Tainan Kokutai A6M2s depart Buna at 0630 hrs. The formation is led by Lt(jg) Joji Yamashita of the Tainan Kokutai, flying V-117 which is marked with two red command stripes. Their task is to escort D3A1 "Val" dive-bombers from the 2nd Kokutai targeting the airfield at Milne Bay.

2 Approaching the target area, Yamashita briefly breaks away from the other Zero-sens and makes a solitary pass at a B-17E from the 435th BS that is undertaking a reconnaissance mission. He then re-joins the fighter formation.

3 Arriving over Milne Bay at 0820 hrs, the "Vals" begin their attack while the Zero-sens concentrate on strafing an abandoned LB-30 transport.

4 Six Kittyhawk IAs from No. 75 Sqn, landing gear extended, return from a patrol in the midst of the attack. Led by unit CO Sqn Ldr Les Jackson, the pilots immediately retract their undercarriages and go after the IJNAF aircraft.

5 2nd Kokutai Zero-sen pilots Lt(jg) Hidetane Futagami and FPO1c Ko'ichi suddenly break off their strafing runs to engage the first echelon of 12 Marauders from the 22nd BG and their 14 Airacobra escorts.

6 Tainan Kokutai pilot FPO2c Enji Kakimoto sustains hits to his engine when strafing. He too breaks away to attack the Marauders as soon as he sees them, following his chutaicho, Lt(jg) Yamashita, toward the B-26s. The engine in Kakimoto's fighter, V-130, soon fails through a lack of oil, forcing him to ditch in shallow waters two miles west of the airfield at Milne Bay.

7 Yamashita engages the B-26s head on, and during his second pass he is shot down. V-117 crashes in jungle foothills several miles north of the airfield at Milne Bay.

8 FPO1c Sadao Yamashita and Flyer 1c Kihachi Ninomiya from the Tainan Kokutai also attempt to intercept the B-26s, but upon seeing Kakimoto's downed Zero-sen ditched in clear water and close to shore, they break off their attack to strafe the intact fighter in an attempt to stop the Allies from salvaging it.

9 While focused on destroying the downed Zero-sen, both pilots are attacked from the rear by Sqn Ldr Jackson and his wingman Sgt Roy Riddel. With the advantage of both altitude and speed, the two Australians quickly down both IJNAF fighters, killing their pilots.

10 The remaining three Zero-sens continue to engage the B-26s, and their escorts, between layers of localized rainy cloud for a further 20 minutes. No USAAF aircraft are shot down, however.

FOLLOWING PAGES

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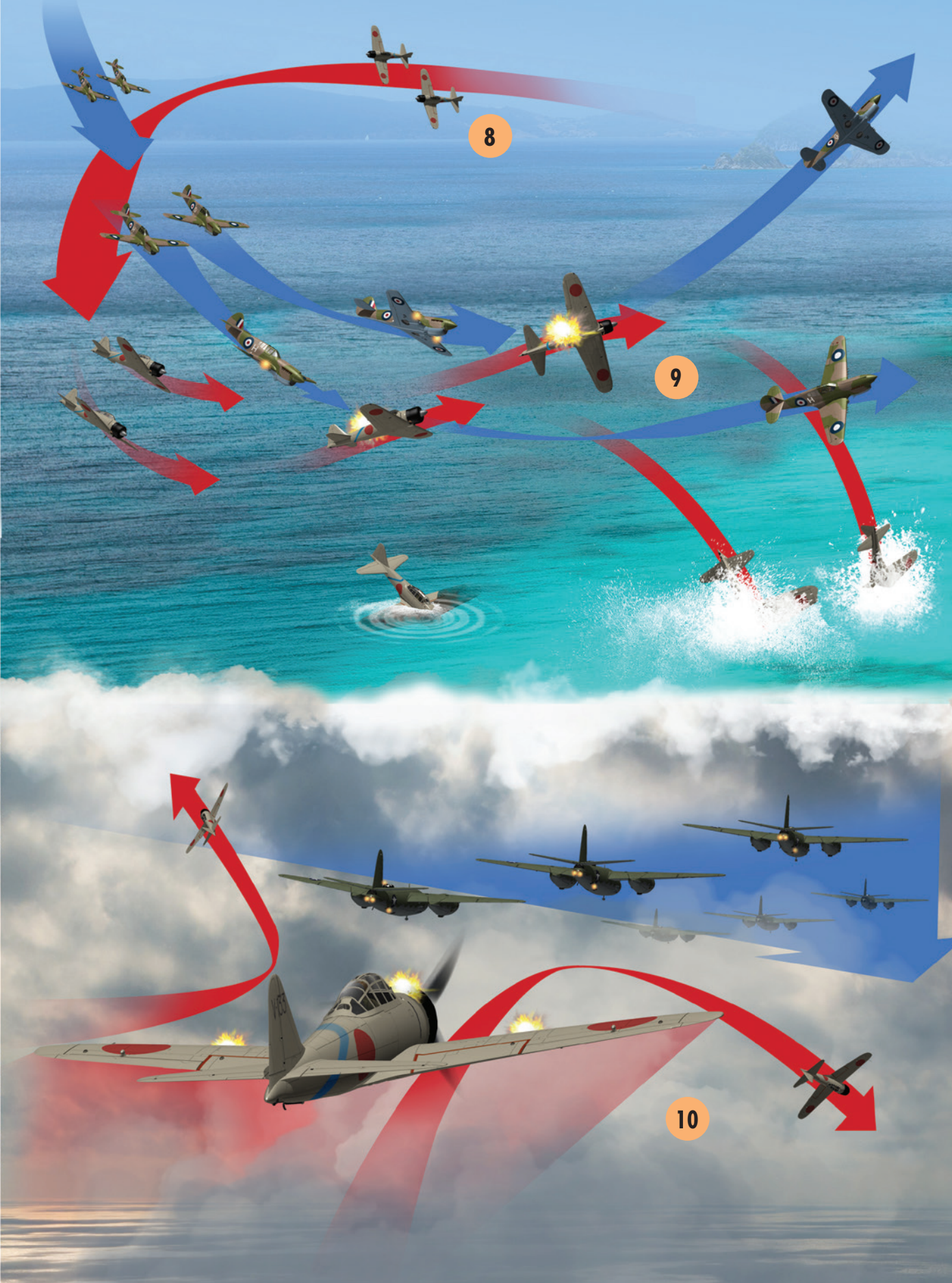
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The handful of Zero-sens that had intercepted the B-26s were so aggressively flown that the American crews thought they had been attacked by up to 15 fighters. The Marauder gunners expended some 3,000 rounds of 0.50-cal. ammunition defending themselves, claiming two Zero-sens shot down. They observed that one had ditched close to shore – obviously Kakimoto. The capricious weather and cloud layers full of rain saw the belligerents play hide-and-seek with each other for some 20 minutes whilst in close proximity.

When the fight was over, Plt Off Stuart Munro's Kittyhawk, A29-108, was missing – the wreckage was located two months later by an Australian Army patrol. With no witnesses to his demise, it appears likely that Munro fell victim to unidentified Zero-sens during the deadly game of hide-and-seek.

Six of the eight "Vals" assigned to the mission left the area at 0845 hrs, followed by the three surviving Zero-sens – FPO1c Kozaburo Yasui from the Tainan Kokutai and both 2nd Kokutai pilots. Back at Buna, Futagami and Ko'ichi audaciously claimed one B-26 probably destroyed, despite having only expended 240 rounds of ammunition between them!

Three days after the heavy losses over Gurney Field, an intriguing episode pertaining to use of the Zero-sen in the Guadalcanal campaign unfolded at the small grass airfield at Buka. Constructed pre-war by the Australian colonial administration, it possessed a modest runway some 700m in length. The Japanese had occupied Buka on 9 March, and initially saw no urgency in putting the rough airfield to use. Indeed, on 26 July an IJN engineering detachment flown in from Rabaul by "Mavis" flying boat reported it unacceptable for military use because of its poorly-drained runway.

Buka would become a major base by 1943, but this was not the case in the early stages of the Guadalcanal campaign. However, as Japanese losses began to mount in the Solomons attention was refocused on it, as the airfield was 170 miles closer to Guadalcanal than Rabaul. Despite having only limited resources to hand, IJN engineers managed to make Buka suitable for Zero-sen operations.

Following the loss of the carrier *Ryujo* on 24 August during the Battle of the Eastern Solomons, Vice-Admiral Nishizo Tsukahara, commander of the 11th Air Fleet at Rabaul, asked 3rd Air Fleet commander Vice-Admiral Chu'ichi Nagumo if he could borrow a detachment of carrier-based Zero-sens. These would be deployed to assist CAP duties for destroyer supply runs to Guadalcanal, as the Tainan Kokutai was then under considerable strain because it was the only unit in-theater whose Zero-sens could reach Guadalcanal from Rabaul.

Tainan Kokutai A6M2 V-130 was retrieved from shallow water offshore Milne Bay after it was ditched by FPO2c Enji Kakimoto, his fighter having been hit during a series of strafing passes on nearby Gurney Field on 27 August 1942. Whilst attempting to rejoin his comrades heading back to Buna, Kakimoto was forced down when his fighter's engine lost all of its oil. After swimming to a nearby beach, he was captured and later escorted to Gili Gili wharf area by an Australian soldier, James Henderson. (Author's Collection)

Forward-deployed A6Ms based at Buka would be able to better traverse what pilots dubbed the "Guadukanaru Gaito" – the "Guadalcanal Highway."

At this juncture, the 11th Air Fleet was still pressing the 6th Kokutai to expedite the arrival of its remaining Zero-sens from Kisarazu. Although the unit's advanced echelon had already arrived at Rabaul, its Zero-sens were still being tested and its pilots conducting familiarization flights. This non-availability underlined the urgency of Vice-Admiral Tsukahara's request to borrow carrier assets. In the event, the 6th Kokutai's first patrol from Rabaul – consisting of a chutai of nine Zero-sens – did not eventuate until 1 September. Although the unit's Model 32s lacked the range to reach Guadalcanal from Rabaul, they would reduce pressure on the Tainan Kokutai by undertaking some of the latter unit's duties over New Guinea.

At Guadalcanal, the first P-400 Airacobras to reach Henderson Field (formerly "Runga") touched down before midday on 24 August. This advance detachment of nine 67th Fighter Squadron (FS) aircraft, led by Capt Dale Brannon, had staged via Espiritu Santo, in the New Hebrides. The final transit sector took just short of four hours to complete, and was flown low at 200ft.

Meanwhile, Vice-Admiral Nagumo had offered 30 Zero-sens to Vice-Admiral Tsukahara for Buka – 15 each from *Shokaku* and *Zuikaku* were authorised to undertake a week's detachment from their carriers. A key participant was the hikotaicho of the *Shokaku* fighter group, Lt Hideki Shingo. Previously hikotaicho of the Tainan Kokutai in the NEI until late March 1942, Shingo was thus well-qualified to supervise land-based operations.

The argument went that A6M carrier pilots, acclimatized to slow-speed flightdeck approaches, could better handle the short length of Buka's runway than their land-based counterparts. Shingo was duly appointed overall commander for the land deployment, with Lt Moriyasu Hidaka from the *Zuikaku* air group as his deputy. Two more lieutenants, Masanobu Ibusuki and Yasuhiro Shigematsu, from *Shokaku* and *Zuikaku*, respectively, assumed roles as alternative chutaicho and/or shotaicho as required. The deployment would prove more costly than envisaged. Furthermore, poor weather would affect operations for much of the week ashore.

"RICHTHOFEN OF RABAUL"

On 11 August 1942, Tainan Kokutai chutaicho Lt(jg) Jun'ichi Sasai passes close by an RAAF Kittyhawk IA that he has just fatally damaged over Milne Bay. At around midday, Sasai had led six Model 21s from Lakunai, but he had had trouble finding Milne Bay because of thick cloud. At 1245 hrs the six Zero-sens suddenly ran head-on into a combined formation of 16 RAAF Kittyhawk IAs from Nos. 75 and 76 Sqns. Widespread and confused combat subsequently ensued at around 3,000ft, resulting in the loss of three No. 75 Sqn aircraft and their pilots. FPO3c Masuaki Endo was the only Japanese casualty, being wounded in combat and then forced to ditch offshore Buna between IJN warships. These later returned him to Rabaul, where he was admitted to the IJN hospital, recovering fully after several weeks' convalescence.

High-scoring ace Sasai earned his nickname following a letter that he wrote home shortly before his death in action over Guadalacanal on 26 August 1942. He reported that he had shot down 54 aircraft to date, and then went on to imply that he would soon exceed the record set by ranking World War I ace Manfred von Richthofen, who was credited with 80 victories.

FOLLOWING PAGES

A6M2 Zero-sens and D3A "Vals" prepare to take off from *Shokaku* on 26 October 1942 as part of the second wave attack on the US task Force during the Battle of the Santa Cruz Islands. Two months prior to this photograph being taken, 15 of the carrier's Zero-sens had spent a week ashore at Buka in August–September under the leadership of Lt Hideki Shingo. Hikotaicho of the *Shokaku* fighter group, his fighter (complete with command bands on its fin and rudder) can be partially seen at the far right of this shot. (Tony Holmes Collection)

On 28 August reasonable weather northeast of Bougainville found *Zuikaku* and *Shokaku* steaming into the prevailing wind, allowing the Zero-sens to launch at 0930 hrs. Led by *Shokaku* hikotaicho Hideki, they arrived overhead Buka just over two hours later. Five *Shokaku* Zero-sens led by FPO1c Jinichi'ro Kawanishi conducted CAP overhead while the remaining fighters landed. Shortly thereafter, a lone B-17E appeared, which Kawanishi's patrol climbed to intercept. The bomber escaped in heavy cloud, however. When the CAP returned to Buka at 1215 hrs, *Shokaku* pilot FPO3c Mitsuyoshi Takasuga stalled with full flaps and spun into the dirt off to the left side of the runway, killing him instantly. For the rest of the day a cautious Shingo ordered patrols (each consisting of one shotai of three Zero-sens) that all proved uneventful, with the last one landing at 1800 hrs before sunset.

Buka's Zero-sen detachment rose early on the morning of 29 August to the news that the previous afternoon had seen attacks on a major supply run to Guadalcanal by IJN destroyers. The 11th Air Fleet had ordered a reprisal bombing attack, and the Buka pilots had been tasked with protecting "Bettys" headed for Guadalcanal. At 0900 hrs Shingo led 22 Zero-sens (12 from *Shokaku* and ten from *Zuikaku*) aloft, and they rendezvoused overhead Buka with the incoming bombers (18 Misawa and Kisarazu Kokutai G4M1s led by Misawa officer Lt Rinji Morita) from Rabaul. As they all headed down the "Guadukanau Gaito," Shingo flew his Zero-sen higher and behind the bombers so that he could keep a wary eye for US fighters and also enjoy the benefit of altitude.

Bombs were dropped over Henderson Field at 1155 hrs, and five minutes later ten F4F-4 Wildcats from VMF-223, led by unit CO Maj John Smith, turned their attention exclusively to the trailing Kisarazu "Betty." At that point the bombers were banking for home, steadfastly following aircraft from the Misawa Kokutai. A fast high side pass through the nine Kisarazu bombers resulted in the downing of WO Haruo Yamamoto's "Betty." The Wildcats

also mauled FPO1c Yoshitake Yamada's bombers sufficiently that it had to force-land at Buka at 1425 hrs. Some F4Fs got in two passes, and regardless of abundant Wildcat claims, it appears Capt Marion Carl was a key player in the demise of at least one of the downed bombers.

Shingo's Zero-sens now entered the fight at high speed, and widespread dogfights ensued. Well-aimed rounds fired from a Wildcat (possibly flown by 2Lt Zenneth Pond) resulted in the explosion of FPO2c Seiji I'ishi's A6M2, costing him his life. The remaining Zero-sen pilots in turn claimed four "Grummans" destroyed, although there were only two casualties from VMF-223. 2Lt Eugene Trowbridge's badly damaged F4F made it back to Henderson Field and was later scrapped and 2Lt Pond's fighter had its engine shot up. Forced to withdraw from the engagement, he was within gliding range of home when he lost all power and had to dead-stick land on to the dirt runway. Back at Henderson Field, Smith's pilots elatedly claimed five bombers and three Zero-sens as definites. They had in fact shot down only one example of each.

Shingo's scattered Zero-sens, meanwhile, returned to Buka in dispersed groups, where they arrived piecemeal between 1445–1530 hrs. When they landed, they could see a crippled Kisarazu Kokutai "Betty" on its belly to one side of the airfield. It served as a stark reminder of the vigorous fight, Yamamoto's G4M having flattened a path through Buka's long kunai grass.

The following day (30 August) was an infamous one for the IJNAF fighter force in the South Seas air war, as it saw the largest single mission combat loss of land-based Zero-sens – albeit borrowed from carriers – for the entire 1942 campaign.

The action started early when, at 0030 hrs, 14 SBD Dauntless dive-bombers took off from Henderson Field intent on sinking Japanese destroyers undertaking nocturnal supply runs, but they found none. A drawcard in the events that were about to transpire was the transport vessel USS *William Ward Burrows* (AP-6) which had anchored offshore Henderson Field around midday on 29 August. Its cargo was crucial to the US Marine Corps flyers on Guadalcanal, for it had brought in equipment and men to support Marine Air Group 23's aviation needs. With only half the cargo unloaded, the merchantman weighed anchor and headed for the overnight shelter of Tulagi. Unfortunately, it ran aground on Sylvia Reef at 1750 hrs, and despite several tow rescue attempts to yank it free, the next morning found the vessel still stranded.

Ongoing failed efforts to get the ship moving, including a broken towline, increasingly disquieted Cactus Air Force (inspired by the code name for the airfield on Guadalcanal) commanders, whose aircraft were reliant on the unloaded cargo. Not wanting *William Ward Burrows* to become a vulnerable target during inevitable air raids by the IJNAF, it was decided to unload the remaining cargo into smaller vessels – a decision which proved wise. In the end the ship was not towed clear until last light on 3 September. Until then, CAPs would keep an eye on the marooned vessel, which had indeed been a magnet for Japanese attacks.

The first aerial activity by the IJNAF over Guadalcanal on 30 August came at 0930 hrs when a coast watcher at Buin forewarned of 20 single-engined aircraft headed for Henderson Field. This was in fact a combined formation of 18 Buka-based A6M2s (seven *Shokaku* Zero-sens and 11 from *Zuikaku*, the latter led

by Lt Moriyasu Hidaka) with *Shokaku* buntaicho Lt Hideki Shingo in overall command, the fighters having departed the island airfield barely 30 minutes earlier. The pilots had no restrictive escort duties and were looking for trouble.

They would soon find it in the form of four Airacobras from the 67th FS on a CAP overhead Tulagi to keep a watchful eye on the foundered *William Ward Burrows*. The USAAF fighters were led by Capt Thomas Christian, who, after a frustrating period of circling in squalls at 14,000ft, had decided to lead his pilots back to Henderson Field due to the deteriorating weather.

It was at this point that his flight was ambushed by Hidaka's Zero-sens, who cut through the Airacobras like a buzz saw. Attacked at close quarters, one dived away in flames. The aircraft was flown by either 1Lt Keith Wythes or 1Lt Robert Chilson, both of whom remain MIA to this day (several months later, a Japanese diary was found which described the capture of an American pilot on this date – certainly either Wythes or Chilson, neither of whom would have lasted long in captivity).

The Allison V-1710 engine in 1Lt Albert Dutton's fighter seized when it was hit and he bailed out, landing in a tree on an unidentified small island in Sealark Channel. He regained consciousness to find himself strung up with black ants crawling over him. A stirred Dutton soon cut himself down and later returned to base after crossing Sealark Channel in a canoe with the assistance of island seafarers. He was medically evacuated from Henderson Field on 2 September.

While Christian and his squadronmates were fighting for their lives, at 1105 hrs eight F4Fs from VMF-223 (again led by Maj Smith) and a further seven Airacobras from the 67th FS (led by Maj Dale Brannon) scrambled from Henderson Field into increasingly overcast skies. None of Brannon's pilots, who had arrived only days earlier, had yet faced combat. Their counterparts from VMF-223 climbed with them in the direction of the incoming Zero-sens.

The engagement that ensued produced many American victory claims, and it is hard to apportion credit in the fierce and confused action fought between 15 US fighters and 18 A6Ms. The two formations met at 1145 hrs in widespread combat that ranged from 8,000ft up to 20,000ft. 1Lt John Thompson's Airacobra was ambushed from behind and below by a Zero-sen masked by cloud cover. Thompson managed to break off and get away, returning to Henderson Field with 15 holes in his airframe and a shoulder wound. Squadronmate 1Lt Pete Childress got into a separate fight that took him back in the direction of Guadalcanal. With his fighter having been badly shot up, he bailed out about two miles from Henderson Field. Childress fortuitously made his way back through no-man's land, keeping a wary eye out for Japanese soldiers.

Meanwhile, Smith's eight Wildcats also had a fight on their hands at around 14,000ft. The VMF-223 pilots were extremely tired, having been on standby since the SBD mission at 0030 hrs. Capt Carl was among them, and he would claim three Zero-sens destroyed and Smith four – the remaining Wildcat pilots were credited with seven victories between them. Brannon's Airacobra pilots later claimed four kills, making a total of 18 Zero-sens destroyed between the two units.

After losing all four Airacobras from the first patrol, several more were later written off following the second action due to battle damage. Whilst the American claims are exaggerated, this fight nonetheless proved to be a stunning victory for VMF-223. Indeed, the unit shot down nine of the best

carrier pilots the IJNAF could offer in a one-sided victory, and the reasons behind this heavy loss still remain perplexing. Four of the participants flying Zero-sens were China War veterans, so the encounter speaks volumes for the skill of Carl and Smith, particularly. Not a single Wildcat was lost, with only 2Lt Charles Kendrick suffering minor wounds when his Wildcat was holed.

In return, *Zuikaku* pilots WO Tsuyoshi Sumita, FPO1c Terusuda Chu'uma, FPO3c Minoru Awao, and FPO1c Shigeru Makino were all killed. The *Shokaku* pilots lost were FPO1c Jinichi'ro Kawanishi, FPO1c Kazuo Ogihara, FPO1c Satoshi Nakamoto, and FPO3c Zenzou Tanaka. Extraordinarily, although buntaicho Lt Hideki Shingo had his engine shot out, he managed to force land in a grass plain on Guadalcanal's northern littoral. There, he was met by surprised Japanese soldiers, and later returned to Buka by destroyer.

In an attempt to make good losses such as this, the IJNAF continued to send replacement aircraft and pilots to the South Seas theater during the final months of 1942. The last Zero-sen unit posted to Rabaul that year was the 252nd Kokutai, which arrived on 9 November when 21 Model 32s and five Model 21s were unloaded from the carrier *Taiyo*. With Capt Yoshitane Yanagimura as hikocho and Lt Masaji Suganami as hikotaicho, the unit's introduction to theater operations was jinxed.

1145 hrs, 30 AUGUST 1942

GUADALCANAL, SOLOMON ISLANDS

1 At 0900 hrs 18 Zero-sens led by Lt Hideki Shingo depart Buka, on Bougainville. Seven of the fighters are from the *Shokaku* air group and the remaining 11 (led by Lt Moriyasu Hidaka in his distinctively marked A6M2 EII-103) are from the *Zuikaku* air group. They head down "The Slot" (New Georgia Sound) for Guadalcanal.

2 Off Guadalcanal, a flight of four Airacobras from the 67th FS is already airborne on CAP overhead Tulagi as they keep watch on the foundered transport vessel USS *William Ward Burrows* (AP-6) stuck on Sylvia Reef.

3 Circling in squalls at 14,000ft, Capt Thomas Christian decides to return the patrol to Henderson Field due to deteriorating weather. Moments later, at 1130 hrs, his flight is bounced from above by Hidaka's Zero-sens. Attacked at close quarters, one Airacobra dives away in flames – it was flown by either 1Lt Keith Wythes or 1Lt Robert Chilson, both of whom remain MIA following this action. One of the pilots was captured and subsequently murdered by the Japanese. The engine in 1Lt Albert Dutton's fighter seizes after being hit and he too bails out.

4 At 1105 hrs, eight F4F-4s (led by Maj John Smith) from VMF-223 and seven more Airacobras (led by Maj Dale Brannon) from the 67th FS scramble from Henderson and head in a loose formation toward the incoming Zero-sens. The opposing fighters engage each other at 1145 hrs in widespread combat that ranges in height from 20,000ft down to 8,000ft. The Wildcat and Airacobra formation scatters in the process.

5 1Lt John Thompson's Airacobra is attacked from behind and below by a Zero-sen that has used growing cloud cover to mask his approach. Thompson returns to Henderson with 15 holes in his Airacobra and a shoulder wound.

6 With his Airacobra having also been badly shot up, 1Lt Pete Childress bails out and lands about two miles from Henderson Field.

FOLLOWING PAGES

1
E11-103
2
3

4
6
5

Cdr Sakae Yamamoto, hikocho of the 2nd Kokutai, stands behind Zero-sen pilot WO Kazuo Tsunoda. This photograph was taken after Tsunoda asked his commanding officer to pose with him at the entrance to Rabaul's Base Fleet HQ in September 1942. (Author's Collection)

To underline the dangers of South Seas weather, the 252nd lost two batches of Zero-sens in separate events. Just four days after reaching Rabaul, chutaicho Lt Shigehisa Yamamoto led six junior pilots (all except one were superior seamen in rank) on a CAP over the crippled battlecruiser *Hiei* off Guadalcanal, before returning to Rabaul. Although heavy cloud and rain squalls impeded their task, Yamamoto's flyers loitered overhead for 90 minutes in the early afternoon, encountering no enemy opposition.

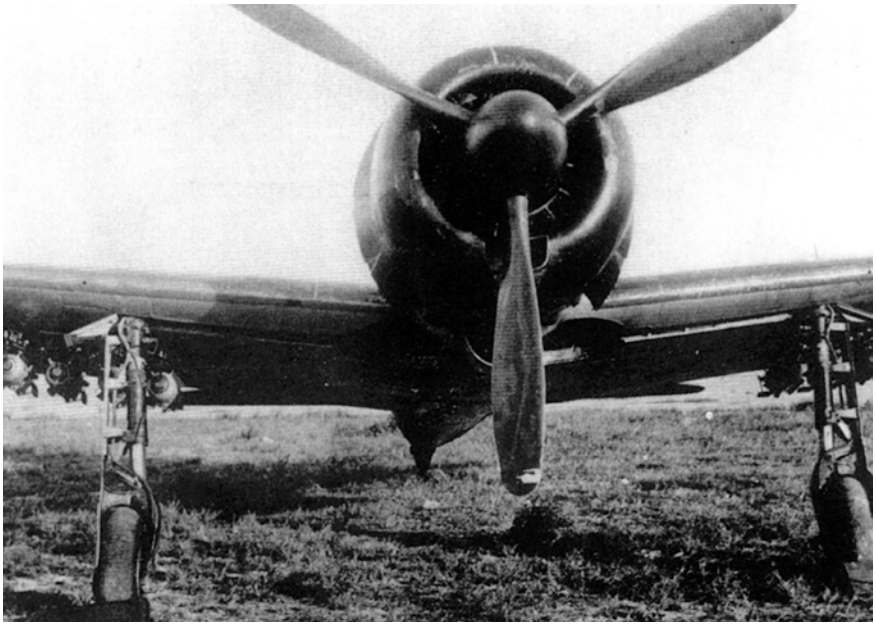
With his duty completed, Yamamoto then tried for a full two hours to find a way home through the murk as the five inexperienced pilots clung to his Zero-sen. Finally, at 1615 hrs, he ditched near the IJNAF seaplane base at Rekata Bay, off the northeast coast of Santa Isabel Island in the Solomons, followed shortly thereafter by the others. Although all six fighters were lost, their pilots were rescued. Yamamoto, however, had badly hit his head during the ditching, and he was subsequently repatriated to Japan for medical treatment.

The bad luck continued when, just 24 hours later on 14 November, Lt Suganami led six Model 21s on a defensive patrol to cover a destroyer run delivering the IJA's 38th Division to Guadalcanal. Whilst trying to attack a formation of eight B-17Es, they were engaged and scattered by 12 F4F-4s from VF-10, embarked in the carrier USS *Enterprise* (CV-6), in 30 minutes of intense combat. Although Suganami subsequently met up with his comrades at the agreed rendezvous point en route back to Rabaul, he never made it home. It appears likely he was wounded in the combat, perhaps by VF-10 pilot Lt "Jock" Sutherland, who claimed a "Nagoya Zero" following the encounter. The ambitious 252nd Kokutai pilots claimed 14 "Grummans" in the wake of this clash, which was more than were airborne. In fact, not one Wildcat was lost. Lt Motonari Suho replaced Suganami as hikotaicho.

The unit detached a chutai led by Lt(jg) Isahiro Chikanami to Lae and Buna on 20 November. When Munda airfield was opened to air operations on 23 December, 21 Zero-sens from the 252nd Kokutai headed there, accompanied by nine more from the 204th Kokutai. However, over the following two days, 11 aircraft from the 252nd Kokutai were damaged or destroyed at the newly opened airfield by a series of Allied bombing attacks.

VIEW FROM THE COCKPIT

WO Kazuo Tsunoda was in the first cadre of 2nd Kokutai Zero-sen pilots to serve at Rabaul from early August 1942. His detailed memoirs complement Allied accounts, but one in particular gifts us the view from the cockpit on 14 November, two weeks after the 2nd Kokutai had been redesignated the 582nd Kokutai. This proved to be a memorable day for Tsunoda when, after being attacked by Wildcats, he was forced to ditch near the destroyer *Amagiri*.



Developed-for-purpose Type 99 30kg air-to-air bombs are seen fitted to a Model 21 "senbaku" (fighter-bomber) in late 1943. Both the 204th and 582nd Kokutai experimented with these weapons, developed for dropping into enemy bomber formations, as early as November 1942. Indeed, WO Kazuo Tsunoda's aircraft from the 582nd Kokutai was carrying such bombs when it was shot down on the 14th of that month. (Author's Collection)

Several hours prior to being shot down, Tsunoda had led a full chutai of nine Zero-sens from Buka to escort a Guadalcanal-bound flotilla of merchantmen, protected by destroyers. His chutai would in turn be replaced by another patrol. Exceptionally, his "senbaku" (fighter-bomber) Zero-sen carried small Type 99 30kg aerial weapons for dropping into enemy bomber formations. Tsunoda and his chutai departed Buka at 1245 hrs:

> I set off down the familiar "Guadalcanal Highway," but I could barely contain a trembling chest following the morning's briefing. I had already been hit several times during combat and lost many comrades since arriving at Rabaul. As such, I had become used to the "flames of war." One was meant to adapt to facing death each day, but today was different – hikocho Cdr Sakae Yamamoto had made it clear that morning when he addressed the departing pilots that an individual's life, my life, was not precious.
>
> Yamamoto had underlined at the briefing that most reinforcement operations had been curtailed, resulting in the troops on Guadalcanal badly needing supplies to the extent that they were on the verge of starvation. He emphasized that the convoy we were escorting would likely be detected by enemy patrol aeroplanes at daybreak, so attack was almost certain [it was the degree to which Yamamoto emphasized his reliance on the chutai's defensive efforts that alarmed Tsunoda].
>
> What an impressive spectacle of Zero-sens it was, with aircraft "floating" like a painting under the bright sun, and as dependable as ever. While I had witnessed much cruel fighting since Midway and watched army units wither in the Owen Stanley Mountain Range, I could not help but wonder what on earth had the Navy General Staff been thinking when it allowed the IJN to become imperiled in such a remote theater? We were not even halfway to taking an oath on the lawns of the White House in Washington. How could Japan win if transport vessels could not get through? I wondered how we could guard a flotilla with just

Q-102 was a 2nd Kokutai Model 32 abandoned at Buna on 26 August 1942 following damage incurred that day when WO Kazuo Tsunoda fought with Airacobras overhead the airfield. The Hokoku-872 subscript indicates that the fighter was donated by Korean businessman Bang Uiseok. (Author's Collection)

one chutai of aircraft patrolling overhead for an hour. Finally, the silhouettes of New Georgia and Rendova materialized like miniature gardens ahead of us. The belt-like Solomon sea lane shone almost white.

Several plumes of smoke soon became visible, and Tsunoda realized the convoy was already under attack:

It might already be too late. I was upset and angry to the point of tears. I released my drop tank and test-fired my guns. Looking behind me, I saw my wingmen were a good 500m away, the rearmost several kilometers in the distance, apparently the size of a dragonfly. Five ships were aflame as they plowed ahead for Guadalcanal at full speed. It appeared that only one was undamaged – a solitary merchantman at the end of the convoy, and its escort ships could no longer be seen. Was this to be yet another failed reinforcement operation?

Tsunoda next saw an approaching formation of 11th BG B-17Es from Espiritu Santo, divided into two groups (Tsunoda thought they were in three) flying at 12,000ft. While he led his wingmen toward them, seven miles south of his position, at low altitude, an assorted collection of other aircraft were already attacking the ships:

. . . [they] sparkled as though someone had sprinkled silver powder in the blue sky. As to friendly aircraft, well, we looked for them in vain. Hence, once again, I gestured an attack to the others, who moved into a single-column formation exactly as we had practiced. I aimed for the lead aircraft of the enemy group, from which a single stream of gunfire came from the forward upper turret. I evaded this by side-slipping immediately underneath, then climbed and again attacked the enemy's front. My last wingman finally arrived on the scene around the time I completed this second attack.

Down below, a ship already aflame disappeared from sight as it was enveloped by spouts of water. Thankfully, it sailed on with no apparent damage. There was

no point attacking enemies who had already dropped their bombs, so I banked left and right decisively – the signal to reassemble. My wingmen, separated a long way from me during the attack, failed to appear. Instead, they appeared focused on one of the bombers that had offered the most effective defensive gunfire. I could not afford the luxury of waiting for everyone to assemble. Three Zero-sens finally fell into formation, and I gestured for a third attack before diving. A low-altitude enemy formation heading north swerved right and headed for the ships. Although it was dangerous for us to fly any lower, we could not afford to ignore the danger the enemy aircraft posed to our ships.

This low-level formation consisted of seven TBF Avengers, three from VMSB-131 and four from VT-10, all of which were carrying a single torpedo each:

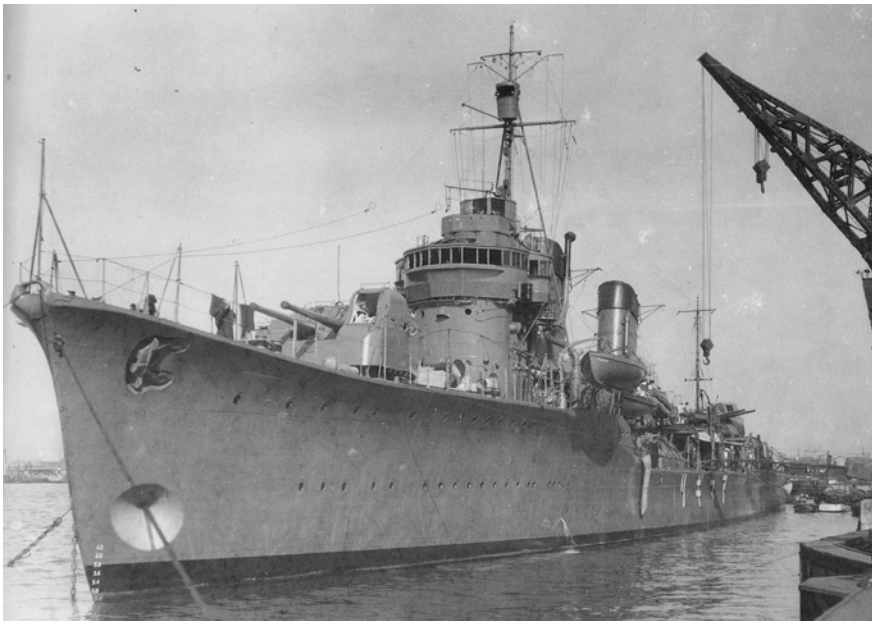
Our Zero-sens were considerably slowed by the bombs we carried, even in a dive, as we headed downwards toward the rear of the enemy formation at a low 1,500ft. Eight of the bombers turned while flying at 700ft or so. At this altitude, I assessed they were planning a torpedo attack, but what to do? We would assuredly be swarmed by a hive of defensive fire from their rear guns. However, it was imperative that we rebuff this torpedo attack. What to do? What a dilemma! The situation had almost consumed me when suddenly the answer became clear – hit them with my own aircraft.

I became dizzy and thought I would lose my eyesight. My chest tightened, but my hands and feet continued to work. The lead aircraft housed a torpedo inside its fuselage. It would be futile to attack it from the upper front or the sides. I should strike from the front at the same altitude. If properly executed, the torpedo would explode – it was not the aeroplane but the torpedo that mattered. I calculated that if I detonated the torpedo inside it with my own aircraft, I would also down several enemy aircraft from this lead formation. Perhaps the enemy's second and third formations might scatter in confusion if the lead formation was obliterated.

I turned my head and looked rearwards, where three Zero-sens steadfastly followed, each spaced about 1,000 yards apart. Suddenly, our prey turned south, becoming more distant while I had been focusing on trying to position us head-on. What had happened? Surely the torpedo-bombers had not been intimidated by a paltry four Zero-sens? My confusion remained, but there was no time to think. I immediately transferred my line of sight to the left and followed them. Then their formation scattered like silver powder, and it was apparent it would take tens of minutes before they would renew their course for another attack.

I reversed and climbed, while making another banking turn to again order reassembly. However, instead of joining me, my wingmen continued to chase the torpedo-bombers. Perhaps they viewed my pulling away without firing a shot as too lenient. I left these enemies to them.

Meanwhile, I screamed at my sluggish Zero-sen, continuing to climb by myself. It was too bad that I had lost about 300ft during the turn. Now I headed for another enemy formation at around 12,000ft. My impatience rose to a fanatical level with my slow bomb-laden Zero-sen. It would take four minutes just to climb to their height before I had the chance to close the distance to them. I gave up,



After being shot down by F4Fs while trying to protect an IJN convoy heading for Guadalcanal, WO Kazuo Tsunoda was saved from drowning by the crew of the destroyer *Amagiri*. Commissioned in 1930, the vessel saw considerable action during the Pacific War (including sinking the US Navy torpedo boat *PT-109*, commanded by future US president Lt(jg) John F. Kennedy) until it was sunk by a mine in Makassar Strait, south of Balikpapan, on 23 April 1944. (Public Domain)

> slowed and decided to return to the ships. Then an approaching enemy formation changed course in my favor to the west in an attempt to reach the north side of the ships. After about ten minutes of descending I was finally able to place myself between the ships and the enemy airplanes, while still retaining an advantage in altitude. As I approached, I saw that the enemy formation was comprised of around 20 or so Grumman F4Fs. I dived to gain speed as I focused on the lead enemy fighter. I cut off his escape route to the left and saw him plunge into a nosedive moments before I jerked the nose of my Zero-sen upwards to confront him head-on in a 60-degree climb – unmatchable by any Allied fighter. I knew full well that I would lose speed if I fired my guns while at this angle.

Tsunoda's estimate of 20 aircraft was in fact on the mark, the formation he had intercepted consisting of eight SBDs from VS-10 led by Lt William Martin in S-10 at 16,000ft, accompanied by 12 Wildcats from VF-10, led by Lt Cdr James Flatley. Eight of the F4Fs strafed the Japanese ships after the SBDs had dive-bombed them, while the remaining four Wildcats circled above at 10,000ft as a fighter CAP. Ens Edward Coalson's Wildcat became separated during the strafing runs and he was attacked by four Zero-sens, claiming one shot down after he looped his fighter for a rear pass on another. No US Navy aircraft were lost in this action, which played out just ahead of the lone Tsunoda. He was then spotted by the four CAP Wildcats lurking above him:

> To further complicate matters, I could not decipher the enemy's movements. Was he aiming for me, or was he trying to dive-bomb the ships below, choosing to ignore my presence? I could not put my finger on it, although I was in the thick of it. Right then, just as I was about to pray for success, I was startled by the shrill noise of gunfire hitting the mark. Like rocks hitting a steel drum, the noise echoed throughout the airframe. An unseen enemy aircraft was firing incessantly at me!

I immediately broke off my chase of the diving aircraft, exhausting the energy of my trusted fighter in the process. Wallowing in the sky, it lost speed and the rudder jammed before it nosed down. Violent vibrations shook the airframe. I had instinctively turned toward base. The fuselage was filled with holes, both huge and small, and the fuel tank and engine oil tank, among others, had been penetrated. Dense white smoke spewed out from the engine, and I now worried my Zero-sen might disintegrate in mid-air.

I opened the cockpit and prepared to jump, with my hand on the parachute ripcord. I gave up the idea of returning to base and instead turned for the Russell Islands – the closest land mass. I moved and checked my head and limbs; no wounds as far as I could see. Then things suddenly went quiet, and it was strange being alone in the sky without the engine noise. I had no worries about fire or disintegrating mid-air as the engine had seized, but hurriedly prepared instead for an emergency landing. I loosened the parachute harness and tightened the shoulder harness. This meant I could clamber out if the airplane capsized in the water. I skimmed the ocean surface, indicating 120 knots with flaps retracted. The ditching was smooth, with minimal shock.

The Zero-sen floated after I jumped into the sea and swam several yards away from it. The fighter soon sank, and I felt abandoned in the middle of a vast expanse. Just when I thought I was a goner, the destroyer *Amagiri* approached. It cruised past slowly amid busy combat that was still unfolding above, while someone threw a casting line from the forecastle. Being a thick rope, it reached no more than halfway to me. Quietly, the bow passed by, then someone else threw me another line from amidships, which landed short by about five yards. I was finally secured by a third attempt from the quarterdeck, and the arms of a strong sailor pulled me through the water as I desperately grabbed the rope. The wake was distinctly turbulent as the ship gathered pace. I heard shouts of encouragement to hold on as I was pulled aboard via a rear metal ladder, swallowing salty water as it thrashed around me. Soon, I was rendered immobile while clinging to the ladder.

The lower half of my body was still recovering from a previous combat wound. In fact, for this mission and several previous ones, I had had to be lifted into my cockpit by mechanics. How then was I supposed to climb this vertical ladder? The ship seemed to be making 12 knots judging from its wake. And then a giant sailor without saying a word grasped my collar and suddenly pulled me up. His precarious grip of the ladder meant we could have both ended up falling into the sea and being churned up by the propeller. He disappeared into the crowd without even looking behind after he lowered me safely on to the quarterdeck. And this was how I narrowly escaped death.

Amagiri anchored offshore Buin the next morning (15 November), and Tsunoda was put ashore near the airfield. There, he learned that the previous day's mission had been a costly one. Flyer 1c Honda Shuzo had gone missing during the battle, with no witness to his demise – he had possibly fallen victim to Wildcat pilot Ens Edward Coalson. Three battle-damaged Zero-sens had landed at Buin, then home to the 204th Kokutai's Model 32s. FPO1c Yokoyama Takashi's Zero-sen had been hit the hardest, with 20 holes being found in the aircraft.

Only three fighters from the 582nd Kokutai had made it home to Buka, where FPO2c Horita Saburo's Zero-sen burst into flames upon landing. Although the aircraft was destroyed, Horita escaped with only bruising. That accounts for eight of the nine Zero-sens allocated to this fateful mission, the ninth being the fighter force-landed by FPO1c Emoto Sei'ichi at an unidentified location. Even by Tsunoda's eventful standards, this had been a particularly rough mission.

Thirteen days after the 582nd Kokutai had been mauled in the skies above the "Guadalcanal Highway," a savage attack by Zero-sens from the 204th Kokutai was made on Royal New Zealand Air Force (RNZAF) Hudson NZ2049 of No. 3 Sqn. The attack was exceptional for two reasons. Firstly, three seconded pilots from the carrier *Hiyo* participated in the action, and secondly, each Zero-sen was armed with a single 30kg bomb.

On this day (27 November), two separate four-aircraft patrols had departed Buin for the Rendova area, and it was the first of these that engaged the Hudson flown by Flg Off George Gudsell. The Zero-sens in question were led by *Hiyo* pilot FCPO Hideo Morishima, with 204th Kokutai pilot FPO1c Hiromichi Kitajou leading the No. 2 shotai of two fighters. The four A6M3s had departed Buin at 1319 hrs on a patrol lasting more than two hours, and during the course of the mission they had intercepted NZ2049. Taking turns to line up and attack the bomber from the rear, the pilots expended no fewer than 480 20mm shells and 1,720 7.7mm rounds but failed to bring the bomber down. The Hudson eventually "escaped eastwards" at 1530 hrs, with Gudsell and his crew having been extremely lucky to survive such odds.

A No. 3 Sqn Hudson identical to this aircraft managed to fend off four Zero-sens from the 204th Kokutai on 27 November 1942, the IJNAF pilots expended 480 20mm shells and 1,720 7.7mm rounds in their failed attempt to down the lone RNZAF light bomber. (Tony Holmes Collection)

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Documents

Kodochosho (Air Operations Logs)

Fighter units Chitose Kokutai, 2nd Kokutai, 4th Kokutai, 6th Kokutai, Kanoya Kokutai, Tainan Kokutai, 201st Kokutai, 204th Kokutai, 251st Kokutai, 252nd Kokutai, 253rd Kokutai and 582nd Kokutai.

Combined Fleet Secret Operations Order No. 19, 1 December 1942.

Senshi Sosho Volumes 14 and 49 *Nanto Homen Kaigun Sakusen.*

Gato Dakkai Sakusen Kaishi up to commencement of operation to recapture Guadalcanal.

Interrogation Reports

582nd Kokutai pilot FPO2c Matao Nakagawa, 204th Kokutai pilot Flyer 1c Masao Kato, 4th Kokutai pilot Katsuro Nagatomo, Tainan Kokutai pilot Enji Kakimoto, and 204th Kokutai pilot Sumio Sato.

Memoirs and Diaries

Memoirs of Tetsuzo Iwamoto (Konnichi-no-Wadai Sha, 1972).

Hand-written diary of 6th Kokutai pilot FPO1c Keijizo Murakami.

Memoirs of 2nd Kokutai pilot WO Kazuo Tsunoda.

204th Kokutai unofficial history (post-war, compiled by veterans).

R-Area unit diaries.

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Front Cover Artwork: A 2nd Kokutai A6M3 Model 32 flown by FPO1c Ki'ichi Iwase confronts an attacking P-39D-1 Airacobra of the USAAF's 35th FG head-on over Buna shortly after dawn on 26 August 1942. Their engines already warm for a planned strike against "Rabi" or Milne Bay, six Zero-sens – three each from the 2nd and Tainan Kokutai – had scrambled to repel a raid by B-26 Marauders. Shortly after commencing their climb to engage the USAAF medium bombers, the Japanese fighters were bounced by escorting Airacobras. Iwase, his comrade FPO3c Daizo Ihara, and Tainan Kokutai pilot FPO3c Kiyoshi Nakano were all killed in the one-sided action that ensued. Q-102, flown by WO Kazuo Tsunoda, who led the 2nd Kokutai shotai aloft, was damaged in the attack. Tsunoda, however, managed to land back at Buna, where the Zero-sen was abandoned. Badly affected by the clash with the 35th FG, the 2nd Kokutai could only field two Model 32s in the Milne Bay attack of the following day. The subscript Kanji adorning the tail of Q-106/HK-886 indicates that this aircraft was the third such fighter donated by students from the National Women's Vocational School. (Cover artwork by Gareth Hector)

Title Page: A6M2 Model 21 X-182 is seen in 3rd Kokutai markings at Lakunai in October 1942, during the unit's brief two-month South Seas deployment. The fuselage band previously worn by the aircraft has been painted over and replaced with a red one, while the red tail stripe is also new. These markings replaced the previous black fuselage band and white tail stripe that had adorned the fighter when it was assigned to chutaicho Lt Zenjiro Miyano, who left the 3rd Kokutai in April 1942. (Tony Holmes Collection)